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### **EXECUTIVE SUMMARY**

Clean energy and sustainability have long been at the core of the mission of the U.S. Department of Energy (DOE) and are reinforced in Executive Order (EO) 13514, Federal Leadership in Environmental, Energy, and Economic Performance, and Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management, DOE has articulated its key strategies and goals in its 2012 Strategic Sustainability Performance Plan (SSPP). The Idaho National Laboratory (INL) Site incorporates these strategies through this plan.

DOE Order 436.1, *Departmental Sustainability*, provides requirements and assigns responsibilities for managing sustainability within DOE to ensure that missions are carried out in a sustainable manner, to institute wholesale cultural change to factor sustainability and greenhouse gas (GHG) reductions into all DOE decisions, and to ensure that DOE achieves the sustainability goals established in its SSPP. DOE Order 436.1 and the SSPP require that DOE sites commit appropriate personnel resources, establish a financing plan that prioritizes the use of lifecycle cost-effective private sector financing and optimizes the application of appropriations and budgeted funds, and establish specific performance measures and deliverables designed to achieve the listed requirements.

The "FY 2013 INL Site Sustainability Plan with the FY 2012 Annual Report," hereafter referred to as the Plan, was developed according to the narrative requirements from the "Guidance for the FY 2012 DOE Site Sustainability Plans" issued on August 10, 2012. This Plan contains strategies and activities that will lead to continual GHG, energy, water, and transportation fuels efficiency to move the INL Site towards meeting the goals and requirements of the SSPP, EOs 13514 and 13423, and DOE Order 436.1 before the end of Fiscal Year (FY) 2020. The Plan summarizes energy and fuel use reporting requirements and references criteria for performing sustainable design. Plan requirements are integrated into each of the INL Site contractor's Integrated Safety Management Systems (ISMS) and Environmental Management Systems (EMS). Finally, Sustainability Program directives based on this Plan are integrated into the INL Ten-Year Site Plan (TYSP) and operations and acquisition systems.

For the purposes of this document, the "INL Site" is considered all operating contractors and the Department of Energy Idaho Operations Office (DOE-ID), and includes the industrial complexes located west of Idaho Falls and the Idaho Falls buildings. INL is considered to be those facilities operated by Battelle Energy Alliance, LLC (BEA). The Advanced Mixed Waste Treatment Project (AMWTP) and Idaho Cleanup Project (ICP) are referred to by their noted acronyms and include all facilities under their individual responsibility.

This DOE-ID INL Site document serves as the overall INL Site Sustainability Plan. It is supplemented by individual contractor plans and strategies as needed. Updates to the Plan are anticipated annually with added specificity as projects are developed and requirements change. This Plan encompasses all contractors and activities at the INL Site under the control of DOE-ID. The operations and activities of the Naval Reactors Facility (NRF), located on the INL Site, are specifically excluded from this Plan.

The Environmental Management mission assumptions for this Plan include the cessation of AMWTP operations and AMWTP facilities achieving a cold, dark, and dry status by FY 2018.

The intent of this Plan is to provide the overall Sustainability strategy for the INL Site during FY 2013. Integral to this Plan is the FY 2012 Annual Report. The Annual Report data for FY 2012 are provided on the Consolidated Energy Data Report (CEDR) that is included as Appendix C.

DOE-ID and the INL Site contractors use their existing EMS to establish goals, track, and review progress towards meeting the energy and water efficiency, greenhouse gas reduction, and renewable energy goals. INL Site contractors will leverage all available sources of funding including Strategic Investment Funding (SIF) and alternative funding programs such as Energy Savings Performance

Contracts (ESPC) and Utility Energy Services Contracts (UESC) to implement energy and water reduction projects. Projects identified to date are included on the Conservation Measures worksheet of the CEDR. The INL Site will leverage utility incentive programs to the maximum extent available.

The INL Site spent nearly \$12.6M in FY 2012 for facility, process, and equipment energy. Of this total, \$11.9M was spent for building energy, \$1.06M was spent for process energy, and \$696K was spent on equipment fuel. The INL Site used over 858.2 billion Btu of energy and 859.0 million gallons of water. Transportation fuel use across the INL Site in FY 2012 totaled 1,001,042 gallons of various types of fuels. The fleet is composed of light-duty vehicles fueled by gasoline and E-85. Heavy-duty vehicles include over-the-road buses fueled by diesel and biodiesel, and a complex assortment of trucks and equipment. Typically, 9.5 million miles are driven annually and over 50,000 hours are logged on heavy equipment.

Tables ES-1 and ES-2 and Figure ES-1 summarize the Annual Report data and provide an FY 2012 status of the DOE SSPP goals. The FY 2012 goals in the graph are the trend point of where the INL Site should be after FY 2012 to remain on track to meet the overall goals by the end of FY 2020. Discussion of the FY 2012 status and planned FY 2013 actions are found in the body of this Plan.

Table ES-1. DOE Sustainability Performance Office (SPO) Key Milestones Status

SPO Goal	DOE Goal	FY 2012 Status
3a.	Reduce Scopes 1 and 2 Emissions by 1% (15% cumulative from FY 2008)	-20.3
3b.	Reduce Scope 3 Emissions by 1% (3% cumulative from FY 2008)	-7,3%
3c.	Reduce Energy Intensity by 21%	-13.8%
3d.	Meter 90% of the Site's Total Electricity	49%
3e.	Meter 25% of the Site's Total Natural Gas by 2015	100%
3f.	Assess 100% of Facilities for Energy and Water Measures	75%
3g.	Maintain 5% Renewable Energy as Percent of Facility Energy Use	9.9%
3h.	Reduce Water Use by 2% (10% cumulative from FY 2007)	-11.4%
3i	Reduce Petroleum Use by 2% (14% cumulative from FY 2005)	-20.3%
3j.	Increase Alternative Fuel Use (61% cumulative from FY 2005)	154%
3k.	Reduce Fleet by 15%	35%
31.	9% of Building Stock meets Federal Guiding Principles for HPSB	2%

Table ES-2. Sustainability Goals Discussion.

SSPP Goal	DOE Goal	Performance Status	Planned Actions and Contribution	Risk of Non- Attainment
1.1	28% Scope 1 & 2 GHG reduction by FY 2020 from a FY 2008 baseline	The INL Site combined Scope 1 & 2 GHG emissions are down 20.3% from the FY 2008 baseline.	GHG emission reductions will primarily be obtained through efforts to reduce building and transportation energy.  AMWTP contract completion will contribute to further reductions toward the goal.	Medium

Table E	ES-2. (continued).				
SSPP Goal	DOE Goal	Performance Status	Planned Actions and Contribution	Risk of Non- Attainment	
1.2	13% Scope 3 GHG Reduction by FY 2020 from a FY 2008 baseline.	The INL Site combined Scope 3 GHG emissions are down 7.3% from the FY 2008 baseline.	The INL Site will reduce Scope 3 GHG emissions primarily through employee commute reduction tactics and employee travel reduction tactics.	Low	
2.1	intensity reduction by FY 2015 from a FY 2003 baseline  energy intensity 13.8% from the FY 2003 baseline intensity as demonstrated through data entered into the CEDR and compared to FY 2003 data.  rec are alt inc thi rec in Fir		The INL Site short-range energy reduction strategies account for a 22% reduction in energy intensity by FY 2015. An 8% gap in electrical intensity reduction exists. To achieve the initial 22% reduction, capital project upgrades are planned primarily through alternative funding mechanisms that include ESPC and UESC. Closing this 8% energy reduction gap will require approximately \$42M—\$52M in energy efficiency projects.  Finally, AMWTP contract completion will contribute to further reductions, helping make progress toward the goal.	Medium	
2.2	Individual buildings metering for 90% of electricity (by October 1, 2012); for 90% of steam, natural gas, and chilled water (by October 1, 2015).	The INL Site meters 100% of its natural gas and 49% of its electric usage. An analysis was performed on all existing infrastructure that will still be in place in FY 2020. From this analysis, the INL FY 2011 Metering Plan (PLN-3911) was developed to provide a roadmap on how the INL Site will reach the goal of metering 90% of electricity.  Metering was installed in FY 2012 on three facilities with the highest probability of meeting the Guiding Principles.	Meters will be installed over the next 2 years to be compliant with the 90% metering goal for Nuclear Energy (NE) facilities. The six remaining facilities identified as having the highest probability of meeting the Guiding Principles are targeted for meter installations in FY 2013.  All other meters are planned for installation through ESPC projects. DOE Environmental Management (EM) may install meters on up to 12 INTEC buildings between FY 2013 and FY 2015 as funding is made available.	Low The INL Site did not meet the October 01, 2012 deadline, but will meet the 90% goal for NE buildings within 2 years.	

SSPP Goal	S-2. (continued).  DOE Goal	Performance Status	Planned Actions and Contribution	Risk of Non- Attainment
2.3	Cool roofs, unless uneconomical, for roof replacements unless project already has CD-2 approval. New roofs must have thermal resistance of at least R-30.	The INL Site replaced 21,869 ft² of roofing on four existing buildings with cool roofs using the Roof Asset Management Program (RAMP). Cool roofs were also installed on three new INL facilities. A total of 379,000 ft² or 17% of DOE-NE owned and operating INL roof area now have cool roofs.	INL roof replacements planned for FY 2013 with the RAMP program will result in new cool roofs exceeding 12,000 ft <sup>2</sup> .  Additionally, the new Research and Education Laboratory (REL) will be complete in FY 2013 and will include a cool roof on approximately 44,000 ft <sup>2</sup> .  AMWTP project completion does not involve installation of cool roofs.  ICP contract extension includes narrative for possible cool roof evaluation at CPP-666, dependent upon funding priority	Low
2.4	15% of existing buildings greater than 5,000 gross square feet (GSF) are compliant with the Guiding Principles of High Performance Sustainable Buildings (HPSB) by FY 2015	The INL Site has 2% of existing facilities that are compliant with the Guiding Principles.  Although the INL Site requires only 26 facilities to achieve the Guiding Principles (15% of the entire INL Site), INL identified 27 facilities with the highest probability of meeting the Guiding Principles. These facilities were entered into Portfolio Manager, are planned for meter installations, and are included in plans for energy and efficiency upgrades.  Of these 27 facilities, two are currently Leadership in Energy and Environmental Design (LEED <sup>TM</sup> ) Gold certified, four are in construction and are awaiting LEED <sup>TM</sup> Gold certification, and the balance are being worked for Guiding Principle implementation.	All enduring infrastructure at Central Facilities Area and the Advanced Test Reactor Complex (ATR), and low security facilities at the Specific Manufacturing Complex (SMC) were evaluated as part of developing INL ESPC Project 3. The five Guiding Principles are planned for implementation through the ESPC, although not at EM facilities.  In FY 2013, assuming that funding is available, INL will implement projects in Idaho Falls (IF) Facilities including IF-616 (WCB), IF-654 (EROB), and IF-663 (Records Storage Facility) that will help these buildings obtain a passing Energy Star rating score and will be further evaluated using Portfolio Manager. INL is planning to certify IF-663 and IF-654 in FY 2013 as meeting the Guiding Principles using Portfolio Manager, an increase of 1%.  Non- Attainment Issue: Full implementation of the Guiding Principles is highly dependent upon energy and water usages and securing an acceptable Energy Star	Medium See Non- Attainment Issue statement

1401017	S-2. (continued).			
SSPP			Planned Actions and	Risk of Non-
Goal	DOE Goal	Performance Status	Contribution	Attainment
			score. As the final buildings are metered, there may not be sufficient time to implement changes to improve the Energy Star score. The INL Site is responsible for obtaining Guiding Principle certification on 15% of the INL Site Buildings (26 total based on current enduring infrastructure numbers). AMWTP and ICP projects focus on completing the cleanup mission so most facilities have a limited operational term and only minimal planned investments. Upgrades to meet the guiding principles will be considered for maintenance projects or if major facility modifications are required to meet mission requirements. AMWTP and ICP facilities were removed from the ESPC Project 3 scope at EM HQ direction in FY 2011 due to uncertain operating terms and are not expected to contribute to this goal. INL had planned to obtain Guiding Principle certification on 16 buildings, which equates to 15% of the INL/NE controlled buildings. Although a new plan is in place to achieve Guiding Principle compliance on all 26, the remaining 10 facilities were added in FY 2012 to INL's total and may not reach Guiding Principle implementation until after FY 2015. Energy efficiency project funding, meter installation, and operating considerations may cause the new planned Guiding Principle implementation date to slip 1 or 2 years for the additional 10 buildings.	
2.5	All new construction, major renovations, and alternations of buildings greater than 5,000 GSF must comply	The INL Site ensures all new construction, major renovations, and alternations of buildings greater than 5,000 GSF comply with the Guiding Principles and where the work exceeds \$5M, are	INL's new Radiological Environmental Sciences Laboratory (IF-683) and Energy Systems Laboratory (IF-685) will be certified at LEED <sup>TM</sup> Gold in FY 2013 and the new Research and Education Laboratory (IF-688) is under construction and is expected	Low

	S-2. (continued).			Risk of
SSPP Goal	DOE Goal	Performance Status	Planned Actions and Contribution	Non- Attainment
	with the Guiding Principles	LEED <sup>TM</sup> Gold certified or equivalent.	to be submitted for LEED <sup>TM</sup> Gold in FY 2014. The INL TYSP institutionalizes sustainability as a core driver during campus and building planning.  AMWTP and ICP project completion requires minimal construction and do not certify temporary structures used for waste exhumation.	
2.6	7.5% of annual electricity consumption from renewable sources by FY 2013 and thereafter (5% FY 2010–FY 2012).	The INL Site produced no onsite renewable energy, and the electricity available for purchase is currently obtained from up to 60% renewable (including old hydro electric). The INL Site is meeting the goal by procuring 22,000 MWh of Renewable Energy Certificates (RECs) from the local Utility, Idaho Falls Power. This purchase represents 10% of the INL Site electric usage. This REC purchase supports further renewable energy development and is a premium purchase of new renewable power from the local supplier utility.	INL continues to evaluate Renewable Energy Generation capability as technology changes and will annually purchases RECs in amounts as outlined in the Energy Policy Act of 2005.  AMWTP and ICP project completion do not involve installation of renewable energy systems.  Non-Attainment Issue:  Although technically feasible, low electric costs and long paybacks make renewable energy installation on the INL Site economically infeasible. ESPC Project 3 review of renewable energy installation (solar, and wind) resulted in 211 and 60 year return on investments for 50 kilowatt and 1 megawatt projects respectively. These projects may have provided up to a maximum of 2% onsite renewable energy generation. An INL estimate for a privately operated wind farm installed on INL property would require \$15M in supporting infrastructure for the project to be commercially viable. Onsite solar installation would require over \$35M, plus the cost of maintaining an owned solar generating facility.	Medium See Non- Attainment Issue statement

Table E	le ES-2. (continued).						
SSPP Goal	DOE Goal	Performance Status	Planned Actions and Contribution	Risk of Non- Attainment			
3.1	10% annual increase in fleet alternative fuel consumption by FY 2015 relative to a FY 2005 baseline.	The INL Site has exceeded the FY 2015 goal by increasing alternative fuel 154% relative to FY 2005. In FY 2012, the INL Site used 194,429 gasoline gallon equivalents of alternative fuels.	The INL Site will continue to obtain alternative fuel vehicles in support of this goal. INL will optimize the fleet through bus and heavy truck replacements that are more efficient and operate on biodiesel.  However, recent DOE-HQ and Government Services Administration (GSA) direction has placed an emphasis on hybrid vehicle purchases. Hybrid vehicles are not flex fuel capable, so future alternative fuel consumption may decrease.	Low			
3.2	2% annual reduction in fleet petroleum consumption by FY 2012 relative to a FY 2005 baseline.	In FY 2012, the INL Site used 747,777 gasoline gallon equivalents of petroleum, a 20.3% reduction from FY 2005.	The INL Site will continue to obtain increasingly fuel-efficient light-duty vehicles, continue to use B20 and E-85 fuels, and research the feasibility of implementing alternative fuel for bus operations.  EM mission completion will contribute to further reductions, helping exceed the goal.	Low			
3.3	75% of light- duty vehicle purchases must consist of alternative fuel vehicles (AFVs) by FY 2020 and thereafter.	The INL Site acquired nine light-duty vehicles in FY 2012, all of which are flex-fuel (100%)	The INL Site will continue to replace the current fleet with AFVs as GSA allows.  However, hybrid vehicles are not AFVs and DOE-HQ is mandating hybrid vehicles be purchased. This may greatly affect the percentage of vehicles acquired and the amount of alternative fuel used at INL.	Low  Based on directives and vehicles available from GSA.			
3.4	Reduce fleet inventory by 35% by FY 2013 relative to a FY 2005 baseline.	The INL Site has met the 35% reduction mandate 1 year early.  AMWTP removed vehicles from the fleet by participating in the INL transportation program.	INL will further support this goal by eliminating 100 light-duty vehicles during FY 2013.  EM progress toward mission completion at the AMWTP and INTEC facilities mission and progress will remove dozens of vehicles from the fleet inventory in the next five years.  ICP forecasts a reduction in the heavy equipment rental fleet from FY 2012 levels.	Low			

SSPP Goal	DOE Goal	Performance Status	Planned Actions and Contribution	Risk of Non- Attainment
4.1	26% water intensity reduction by FY 2020 from a FY 2007 baseline.	The INL Site has reduced water use intensity by 11.4% and total water pumped by 18.3% as compared to the FY 2007 baseline.	The INL Site will continue to develop and install projects that conserve water, through ESPC project development at the ATR Complex and Central Facilities Area (CFA) and additional internally funded projects.	Medium See Non- Attainment Issue statement
			EM mission progress, including completion of the AMWTP will contribute to further reductions in both water use and the building footprint.	
			Non-Attainment Issue:	
			Low-cost water and electricity result in long paybacks on water efficiency projects that make implementation economically infeasible. Due to significant fluctuations in water demand (reactor operations and environmental factors such as weather and wild land fires), the INL Site is unlikely to maintain the FY 2012 reductions and achieve this goal. Retrofits on existing industrial process, primarily at the ATR Complex, are estimated to cost between \$100K to nearly \$75M. The INL Site estimates a water intensity reduction of 10%–12% by FY 2020.	
4.2	20% water consumption reduction of industrial, landscaping, and agricultural (ILA) water by FY 2020 from a FY 2010 baseline.	ILA water is not applicable to the INL Site. All water obtained by the INL Site is obtained from the Snake River Plain Aquifer and is potable. The INL Site does not have access to any non-potable water supplies.	NA.	Low

SSPP Goal	DOE Goal	Performance Status	Planned Actions and Contribution	Risk of Non- Attainment
5.1	Divert at least 50% of non-hazardous solid waste, excluding construction and demolition debris, by FY 2015.	The INL Site diverted 33% of its non-hazardous solid waste in FY 2012.	The INL Site will continue to evaluate potential outlets and the expansion of recyclable waste streams and to increase further the amount of wastes diverted from the landfill. Contracts for mowing will be evaluated and modified to incorporate recycle or mulching.	Medium
5.2	Divert at least 50% of construction and demolition (C&D) materials and debris by FY 2015.	The INL Site diverted 30% of its C&D materials in FY 2012.	The INL Site will work to incorporate additional materials into current C&D waste diversion process. However, limited market availability and significant funds needed to implement a C&D recycle program fully will ultimately drive the decision.	Medium
6.1	Procurements meet sustainability requirements and include sustainable acquisition clause (95% each year).	INL implemented a new automated tracking process in FY 2012 and preliminary numbers show that 100% of the construction and janitorial contracts contained the sustainable acquisition clause in the fourth quarter. For the entire Fiscal Year, 71% of the construction and janitorial contracts contained the sustainable acquisition clauses.	The INL Site is incorporating numerous changes to improve the Sustainable Acquisition Program including procedures, policies, and enhanced work processes that increase the visibility, availability, and use of sustainable products.  Sustainable acquisition contract clauses, including reporting requirements, were incorporated into EM contracts in FY 2012.	Low
7.1	All data centers are metered to measure a monthly Power Utilization Effectiveness (PUE) (100% by FY 2015).	INL meters two Data Centers and is connected to the building control system. ICP does not yet meter either data center.	The data center definition was expanded in FY 2012, so ICP now has two data centers listed in the CEDR. Funding dependent, meters will be installed in the future.	Low

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SSPP Goal	DOE Goal	Performance Status	Planned Actions and Contribution	Risk of Non- Attainment
7.2	Maximum annual weighted average PUE of 1.4 by FY 2015.	The INL High Performance Computing (HPC) data center PUE is 1.34. The Information Operations Research Center (IORC) data center PUE is 2.03.		Low
7.3	Electronic Stewardship – 100% of eligible PCs, laptops, and monitors with power management activity implemented and in use by FY 2012.	INL won the Federal Electronics Challenge (FEC) Silver award in FY 2012. Power management controls are in place on the majority of eligible computer systems. At INL, 100% of eligible PCs have power management controls. AMWTP has installed power management controls on eligible computers.	The INL Site will continue to demonstrate commitment to electronic stewardship through compliant procurements and policy changes.  INL will continue to support the FEC and work towards achieving the Gold Award.	Low

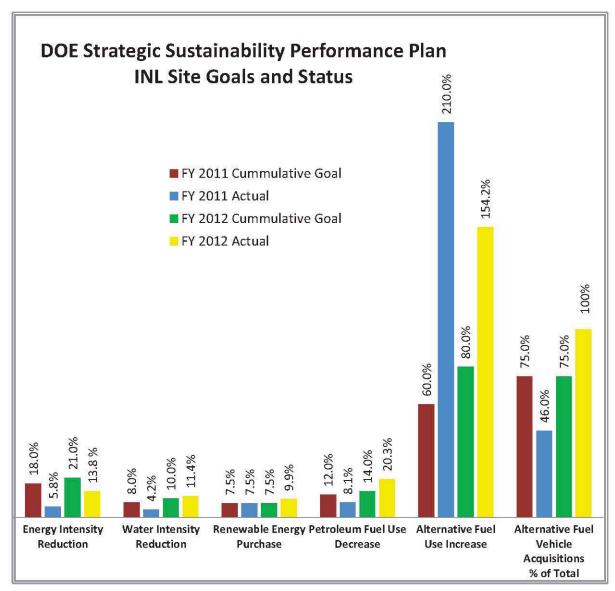
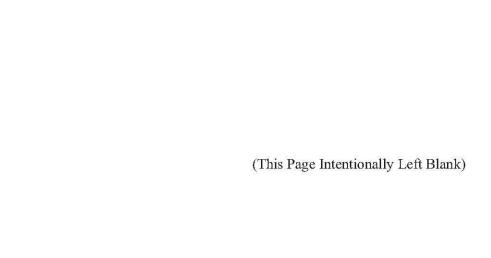


Figure ES-1. Current INL Site status to the DOE goals.

Figure ES-1 shows the INL Site cumulative goal and status for FY 2011 and FY 2012. The cumulative goals are based on individual baseline years as required in Executive Orders.



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### **ACRONYMS**

AFV Alternative Fuel Vehicle

AMWTP Advanced Mixed Waste Treatment Project
ARRA American Recovery and Reinvestment Act

ATR Advanced Test Reactor

B20 Biodiesel

BEA Battelle Energy Alliance, LLC

Btu British thermal unit

C&D Construction and Demolition

CAES Center for Advanced Energy Studies

CD-2 Conceptual Design

CDP Calcine Disposition Project

CEDR Consolidated Energy Data Report

CFA Central Facilities Area

CNG Compressed Natural Gas

CRAC Computer Room Air Condition

CUI Controlled Unclassified Information

D&D Decontamination and Dismantlement

DOE Department of Energy

DOE-ID Department of Energy Idaho Operations Office

E-85 Ethanol 85

EBR-I Experimental Breeder Reactor 1
ECM Energy Conservation Measure

EM Environmental Management

EMS Environmental Management System

EO Executive Order

EPA Environmental Protection Agency

EPEAT Electronic Product Environmental Assessment Tool

EPSCoR Experimental Program to Stimulate Competitive Research

EROB Engineering Research Office Building

ES&H Environment, Safety, and Health

ESCo Energy Services Contractor
ESL Energy Systems Laboratory

ESPC Energy Savings Performance Contract

FAST Fleet Automotive Statistical Tool

FEC Federal Electronics Challenge

FEMP Federal Energy Management Program

FIMS Facilities Information Management System

FRAMES Fire Research and Management Exchange System

FY Fiscal Year

GHG Greenhouse Gas

GPS Global Positioning System

GSA General Services Administration

gsf Gross Square Feet

HEV hybrid electric vehicle

HPC High Performance Computing

HPSB high performance and sustainable building

HQ Headquarters

HVAC Heating, Ventilating, and Air Conditioning

HWMA Hazardous Waste Management Act

IAB INL Administration Building

ICP Idaho Cleanup Project

ILA industrial, landscaping, and agricultural

IM Information Management
INL Idaho National Laboratory

INTEC Idaho Nuclear Technology and Engineering Center

IORC Information Operations and Research Center

IRC INL Research Center

ISMS Integrated Safety Management Systems

IT Information Technology

IWTU Integrated Waste Treatment Unit

LEED<sup>TM</sup> Leadership in Energy and Environmental Design

LNG Liquefied Natural Gas

MFC Materials and Fuels Complex

MIT Massachusetts Institute of Technology

MT Metric Tons

MWWI Mountain West Water Institute

NE Nuclear Energy

NKN Northwest Knowledge Network

NNSA National Nuclear Security Administration

NRF **Naval Reactors Facility** 

NSF National Science Foundation PDU Process Demonstration Unit

PHEV Plug-in Hybrid Electric Vehicle

**PPTRS** Pollution Prevention Tracking and Reporting System

PUE Power Utilization Effectiveness

R&D Research and Development

RAMP Roof Asset Management Program

RCRA Resource Conservation and Recovery Act

REC Renewable Energy Certificate

REL Research and Education Laboratory

RESL Radiological Environmental Sciences Laboratory

RFID Radio Frequency Identification

ROB Research Office Building

SDOP Six Drum Overpack

SIF Strategic Investment Funding

**SMC** Specific Manufacturing Capability SPO

Sustainability Performance Office

SSPP Strategic Sustainability Performance Plan

TSA-RE Transuranic Storage Area – Retrieval Enclosure

**TSB** Technical Support Building

TTAF Test Train Assembly Facility

**TYSP** Ten-Year Site Plan

**Utility Energy Services Contract UESC** 

**UPS** Uninterruptable Power Supply

**USGBC** United States Green Building Council

UTV Utility Terrain Vehicle

VMVirtual Machine

WCB Willow Creek Building



### GOAL PERFORMANCE REVIEW AND PLANS

For the purposes of this document, the "INL Site" is considered all operating contractors and the Department of Energy Idaho Operations Office (DOE-ID), and includes the industrial complexes located west of Idaho Falls and the Idaho Falls buildings. Idaho National Laboratory (INL) is considered to be those facilities operated by Battelle Energy Alliance, LLC (BEA). The Advanced Mixed Waste Treatment Project (AMWTP) and Idaho Cleanup Project (ICP) are referred to by their noted acronyms and include all facilities under their individual responsibility.

The DOE Environmental Management (EM) mission assumptions for this Plan include the cessation of AMWTP operations and AMWTP facilities achieving a cold, dark, and dry status by FY 2018.

### 1.1 Scopes 1 and 2 Greenhouse Gas Reduction

28% Scope 1 & 2 GHG reduction by FY 2020 from a FY 2008 baseline.

Executive Order (EO) 13514 mandates that agencies develop specific greenhouse gas (GHG) reduction targets. Department of Energy (DOE) has set a reduction target of 28% for Scope 1 and 2 GHGs. The EO sets FY 2008 as the baseline year against which reductions will be measured.

The INL Site reported Scope 1 and Scope 2 GHG emissions for the baseline year, FY 2008, and annually thereafter. Scope 1 and Scope 2 are defined as:

- Scope 1. Direct or INL Site-owned emissions that are produced onsite, such as stationary combustion (from fuel combustion), mobile combustion (from fleet vehicles), and fugitive emissions (from refrigerants, onsite landfills, and onsite wastewater treatment). These include emissions that may benefit another entity or contractor, but for which the INL Site controls or owns the associated process.
- Scope 2. Indirect or shared emissions produced by INL Site's electricity, heat, and steam purchases. (Note that INL Site did not purchase heat or steam during FY 2009 through FY 2012.)

The INL Site contractors' Environmental Management Systems (EMS) provide the framework and process for evaluating and monitoring Scopes 1, 2, and 3 GHG emissions and related reduction activities. On an annual basis, appropriate sustainability targets are developed and monitored through the EMS to support the overall reduction in GHG emissions.

The challenge is to minimize the impact of operations while increasing the growth of the INL Site, balanced with EM closure activities. INL is integrating environmental performance improvement in the areas that matter most to its stakeholders and the Laboratory, including minimizing the environmental footprint, taking a progressive approach to climate change, and championing energy conservation.

### 1.1.1 Performance Status

Based on data entered into the Consolidated Energy Data Report (CEDR) and as shown in Table 1, the INL Site has reduced Scopes 1 and 2 combined emissions by 20.3% in FY 2012 as compared to the FY 2008 baseline.

Table 1. INL Site Scopes 1 and 2 combined GHG calculation results for FY 2008 and FY 2012, and the FY 2020 goal.

Emission Type	FY 2008 Baseline (MT CO <sub>2</sub> e)	FY 2012 Actual (MT CO <sub>2</sub> e)	FY 2020 Reduction Goal (MT CO <sub>2</sub> e)
Scopes 1 & 2 Combined	141,102.9	112,484.3	101,594.1

Many factors influence the INL Site's GHG emissions, including the large land area on which the Laboratory's facilities are located. The area requires long commutes and an extensive fleet to provide transportation for desert site workers, and contains many antiquated inefficient facilities built before the current appreciation for energy efficiency and high-performance design. These factors tie directly into the following conclusions from the INL Site's baseline GHG inventory:

- Electricity is the largest contributor to the INL Site's GHG inventory
- Other sources with high emissions were stationary combustion and fugitive emissions from the onsite landfill
- Among the sources with low emissions within Scopes 1 and 2 were fugitive emissions from refrigerants and onsite wastewater treatment.

### 1.1.2 Planned Actions

The INL Site will continue to implement projects that reduce electricity and fuel usage, reducing corresponding Scope 1 and Scope 2 emission reductions. ICP will continue its closure mission, discontinuing processes and making facilities inactive and cold, dark, and dry; or demolishing what is no longer needed. Knowing the target emission for each as found in the INL GHG Reduction Strategy helps prioritize and plan projects accordingly.

Mobile Combustion Reduction tactics include:

- Take advantage of mass transportation and shuttles
  - Significant petroleum reduction and associated GHG reduction could be realized by moving additional numbers of the AMWTP contract force away from the current vanpool system to the existing INL bus operation. A majority of the AMWTP work force could be absorbed into the current bus operations schedule (i.e., fill the empty seats on buses currently traveling to/from the Site).
- Add one additional Park and Ride location to further reduce employee commute and bus fleet fuel usage.
- Evaluate technology that will allow INL to operate the bus fleet on "mixed" fuel, which is a
  combination of compressed natural gas (CNG) and biodiesel. This may allow INL to reduce fuel
  usage by up to 30%.
- Eliminate trips by using tools such as video and Web conferencing for meetings.

  The use of "Go to Meeting" and other similar Web conferencing tools are available as
  - The use of "Go to Meeting" and other similar Web conferencing tools are available and use is expanding at INL.
- Use alternative modes of transportation such as bicycles and low-speed vehicles as appropriate.
   Low-speed vehicles are available and in use inside Site areas.

Right Size Fleet.

INL will allocate the majority of equipment to the end user except for a small centralized fleet of approximately 100 pieces of equipment. In doing so, the custodian will be accountable for cost, acquisition, maintenance, and storage of the equipment. Fleet Management will maintain input on all equipment acquisitions. INL looks to increase the vehicle pool total with one new J-hook truck and two new beds during FY 2013 to enable the use of multiple bed types on one truck.

The Naval Reactors Facility (NRF) has chosen not to implement the park-n-ride concept; however, fuel used to transport NRF staff contributes to INL Site emissions, as INL is the owner and operator of the transportation system. INL will continue to optimize NRF bus routes and run times.

Fugitive emission reduction tactics include:

- Work with recycling coordinator to identify waste diversion opportunities, including increasing the types and quantities of items sent for recycling and implementing composting. These activities will assist with meeting the EO 13514 waste diversion goals.
- Investigate installing a gas collection system at the onsite landfill to use as an energy source.
- Electricity emission reduction tactics include continuing evaluation of onsite renewable energy projects for cost effective options as technology and energy prices change, although there are no plans or funding to install in the near term.
- Use the following tactics to reduce direct purchased electricity:
  - Satisfy sustainable acquisition requirements to purchase Energy Star and Federal Energy Management Program (FEMP) devices (EO 13514 requirement)
  - Meet green building goals for new and existing buildings (Guiding Principles and Leadership in Energy and Environmental Design [LEED<sup>TM</sup>] Gold certification)
  - Continue educational campaign to change employee behaviors (turn off lights and computers when leaving at end of shift, utilize power management when available, avoid using space heaters, personal fridges, etc.)
  - Upgrade Idaho Falls facilities using either Utility Energy Services Contract (UESC) funds or internal upgrade program.

### 1.2 Scope 3 Greenhouse Gas Reduction

### 13% Scope 3 GHG reduction by FY 2020 from a FY 2008 baseline.

Executive Order 13514 mandates that agencies develop specific GHG reductions. DOE has set a reduction target of 13% for Scope 3 greenhouse gases. The EO sets 2008 as the baseline year against which reductions will be measured.

The INL Site reported Scope 3 GHG emissions for the baseline year, FY 2008, and annually thereafter. Using the Global Reporting Initiative standards, Scope 3 is defined as:

• Indirect or shared emissions generated by outsourced activities that benefit the INL Site (occur outside the INL Site's organizational boundaries, but are a consequence of the INL Site's activities). This can include a large number of activities, so the INL Site focused on transmission and distribution losses, employee commuting, employee travel, contracted waste disposal and contracted wastewater treatment since these categories were identified in the Technical Support Document for required reporting. Other activities that could be included in Scope 3 include the embodied emissions of purchased materials.

The INL Site contractors' EMS provides the framework and process for evaluating and monitoring Scopes 1, 2, and 3 GHG emissions and related reduction activities. On an annual basis, appropriate sustainability targets are developed and monitored through the EMS to support the overall reduction in GHG emissions.

As the EM missions end at various site locations, overall Scope 3 emissions are expected to decrease. Between FY 2011 and FY 2017, employees traveling to and from the Site location may be reduced by as many as 2,000 when subcontractors are included. Removing vehicles directly impacts Scope 1 and Scope 3 emissions.

The challenge is to minimize the impact of operations while increasing the growth of the INL Site. INL is integrating environmental performance improvement in the areas that matter most to its stakeholders and the Laboratory, including minimizing the environmental footprint, taking a progressive approach to climate change, and championing energy conservation.

### 1.2.1 Performance Status

Based on data entered into the CEDR and as shown in Table 2, the INL Site has reduced Scope 3 emissions by 7.3% in FY 2012 as compared to the FY 2008 baseline.

Table 2. INL Site Scope 3 GHG calculation results for FY 2008 and FY12, and the FY 2020 Goal, by

emissions category.

Emission Type	FY 2008 Baseline (MT CO <sub>2</sub> e)	FY 2012 Actual (MT CO <sub>2</sub> e)	FY 2020 Reduction Goal (MT CO <sub>2</sub> e)
Scope 3	28,853.7	26,760.9	25,102.7

Similar to Scopes 1 and 2 GHG emissions described above, one of the most significant factors that influence INL's Scope 3 GHG emissions is the large land area that requires long commutes (approximately 50 miles, one way). Transportation fuel was, in turn, the largest source of GHG emissions within Scope 3. Another source with high emissions was business air travel. Sources with low emissions were contracted waste disposal, contracted wastewater treatment, and business ground travel (rental and personal vehicles).

INL continues to reduce GHGs by transporting employees with a modernized transportation system, taking nearly 2,000 cars per day off the road. By streamlining the INL mass transit system that provides safe, efficient, and sustainable transportation to work for INL employees throughout the eastern Idaho region, INL encourages travel behavior changes to reduce carbon emissions and fossil fuel consumption, increased highway safety, and in doing so, INL models future trends in mass transit to local governments planning across the region. Other actions include instituting a park and ride system, relocating employees to town offices, use of ethanol 85 (E-85) and biodiesel (B20) fuels, and use of modern buses, vans, and light-duty vehicles to reduce carbon emissions.

### 1.2.2 Planned Actions

The INL Site will continue to implement projects that reduce employee commute, employee travel, waste disposal, and minimize electric usage to reduce Transmission and Distribution losses. Corresponding Scope 3 emission reductions will occur. Knowing the target emission for each GHG category as found in the INL GHG Reduction Strategy, helps prioritize and plan projects accordingly.

Employee Commute Reduction tactics include:

- Change commute by increasing carpools, change personal car use to INL buses
  - Parking management through parking pricing (e.g., begin charging, give discount for rideshare parking); preferential parking (e.g., designated carpool and vanpool spaces); parking supply reduction.
- Move employee work locations from Site to town when reasonable.
- Increase INL Bus ridership for Site employees by 5%.

- Increase telecommuting.
- Telework centers.
- Facility enhancements.
  - Secure bike storage or bike racks, shower facilities, and lockers.
- Use alternative fueled vehicles on business travel.
- Promote use of emission-free transportation source such as walking and biking.
- Subsidies:
  - Vanpool subsidies on a limited or continual basis.
  - Empty seat subsidy—to limit the amount start-up riders have to pay until new riders join.
  - Bike maintenance subsidy.

Employee Travel Reduction strategies:

- Use video and web conferencing to hold virtual meetings and avoid travel when possible.
- Increase rentals of hybrid and alternative-fueled vehicles over traditional options on business travel.
- Reduce air travel, particularly short-range (<300 miles) air travel, except where necessary for mission accomplishment.
- Reduce car rentals by promoting carpooling at conferences and other meetings on business travel.
- Research establishing a government rate for plug-in hybrid electric vehicle (PHEV) and hybrid electric vehicle (HEV) rentals while on business travel.
- Encourage the use of public or group transportation modes at destination cities.
- Implement the Federal Commuter Tax Credit for employees who chose to car pool to work. Continue to encourage the use of teleconferencing and trip consolidation to reduce miles traveled.

# 2. ENERGY MANAGEMENT AND HIGH PERFORMANCE SUSTAINABLE BUILDINGS

# 2.1 Energy Intensity Reduction

30% energy intensity reduction by FY 2015 from a FY 2003 baseline.

The INL Site goal for energy usage is a 30% reduction of energy intensity by FY 2015, as compared to the FY 2003 energy intensity baseline. Energy intensity is defined as energy use divided by building area and is measured in British Thermal Units per square foot (Btu/ft²). On average, an annual energy use reduction goal of 3% supports meeting the overall goal and provides a means to measure and trend progress. Energy intensive loads that are mission specific are excluded from the goal, according to the *Guidelines Establishing Criteria for Excluded Buildings* published by FEMP on January 27, 2006. The Advanced Test Reactor (ATR) and its support facilities are currently excluded from the reporting goal, but are not excluded from the responsibility to reduce energy use and GHGs where practicable.

Energy sources affected by this goal include electricity, natural gas, fuel oil, liquefied natural gas (LNG), and propane. Methods to reduce energy usage include capital project upgrades, operational modifications, and behavior changes by the INL workforce.

The INL Site energy intensity for FY 2012 was 157,690 Btu/ft² as compared to 183,111 Btu/ft² in FY 2003 for a calculated reduction of 13.8%. This reduction falls short of the desired 21% cumulative reduction goal for FY 2012.

Due to the nature of the various INL Site missions, many operations can be cyclical and result in varying usages of energy. As facilities are removed or processes are modified, the INL Site energy usage intensity can vary seemingly unrelated to actual overall reduction efforts.

The Integrated Waste Treatment Unit (IWTU) was completed in FY 2012 and houses the treatment process for treating the remaining wastes in the Tank Farm Facility. This treatment process initiated startup test operations in third quarter of FY 2012 and is anticipated to go online at the end of the third quarter FY 2013. The treatment process will use significant amounts of water and electricity. The facility does not currently have the capability for individual building metering and is captured in the overall Idaho Nuclear Technology Center (INTEC) metering. While an increase in INTEC energy use will occur, this process is expected to operate for less than 1 year to complete its mission, at which time the facility energy use should decrease back to the current INTEC load.

A future facility is currently being designed for the treatment of the calcine solids stored in the Calcine Solids Storage Facility located at INTEC. The Calcine Disposition Project (CDP) is planning to use a portion of the IWTU facility for this project. The CDP will also be an energy intensive treatment process that could be operational by FY 2020.

The INL Site is planning for significant growth to further its missions with additional process related facilities at the major desert site locations and additional office and laboratory facilities at Idaho Falls locations. The INL Ten-Year Site Plan (TYSP) (DOE/ID-11474) provides an overview and details of conceptual laboratory growth. Several of these new facilities are identified in the New Buildings worksheet of the CEDR.

#### 2.1.1 Performance Status

To meet the Strategic Sustainability Performance Plan (SSPP) energy goal, the INL Site should be at a 21% reduction by the end of FY 2012 as compared to the established FY 2003 baseline. As demonstrated through data entered into the CEDR, the INL Site is at a 13.8% in energy reduction, which also represents a 12.8% reduction from FY 2011.

INL made progress in FY 2012 with realized savings from the Materials and Fuels Complex (MFC) Energy Savings Performance Contract (ESPC) project. Additional energy reductions were realized through completion of five projects with Strategic Sustainability Initiative funding. These projects cost \$800K and installed a new chiller and retrofitted lighting in IF-616/617 (Willow Creek Building [WCB]), new exterior lighting on IF-601 (Research Office Building [ROB]), new water fixtures in IF-602 (INL Research Center [IRC] Office Building), and new CO<sub>2</sub> Controls in IF-654 (Engineering Research Office Building [EROB]).

#### 2.1.2 Planned Actions

The INL Site capital project upgrades are funded primarily through alternative funding mechanisms that include ESPC and UESC. They both use external (non-DOE) funding for energy-related upgrades and are paid back over time using the energy cost savings generated by the project. The UESC process commenced on several owned and leased Idaho Falls facilities, but a major program requirement states that the payback must not exceed the length of the building lease. This greatly limits implementation as most leased facilities have 5 to 10 year leases and most payback calculations are 7 to 15 years. Still, the INL Site is actively pursuing these two alternative funding strategies to obtain additional energy savings. Finally, the INL Site will maximize the use of available utility incentive programs to help fund both internal and alternatively funded projects.

If funding becomes available during FY 2013, INL will supplement the ongoing ESPC project by providing Strategic Investment Funding (SIF) to implement projects that are either not readily adaptable to ESPC projects, or directly influence the efficiency of buildings that INL is pursuing the Guiding Principles.

The following projects were identified that will contribute to continued energy reductions for the INL Site:

- Pending SIF funding allocation in FY 2013, installation of up to eight energy reduction projects are
  estimated for the Specific Manufacturing Capability (SMC), MFC, and the Idaho Falls facilities areas.
  These projects require an estimated \$1.2M and were developed during FY 2012 for implementation in
  FY 2013.
  - 1. SMC Air Handler Heat Recovery Loop
  - 2. INL Administration Building (IAB) Building Automation System and Lighting Controls
  - 3. Information Operations and Research Center (IORC) Liebert System (9) Economizers
  - 4. IF-603 Variable Frequency Drives and Controls
  - 5. EROB Exterior Lighting
  - 6. WCB Exterior Lighting
  - 7. IRC Exterior Lighting
  - 8. MFC Lighting Controls (500 Occupancy Sensors).
- ESPC development continues, including review and acceptance of the Final Proposal from AMERSCO and start of design and construction for all enduring facilities at Central Facilities Area (CFA), ATR-Complex, and selected facilities at the SMC facility. Energy Conservation Measures (ECM) being pursued include lighting, heating, ventilating, and air conditioning (HVAC) controls, boiler plant elimination and fuel conversions, a solar wall installation, and metering.
- ICP planned actions for energy reduction activities after FY 2012 consist of discontinuing processes as the cleanup mission is completed and continued Decontamination and Dismantlement (D&D), which will result in a projected net reduction of building square footage for the INL EM program by the end of FY 2015 of 36,936 ft<sup>2</sup>.
- AMWTP completion will place 12 facilities in a cold, dark, and dry status.

# 2.2 Utility Metering

Individual buildings or processes metering for 90% of electricity (by October 1, 2012); for 90% of steam, natural gas, and chilled water (by October 1, 2015).

Most of the INL Site buildings do not have meters installed. Limited meter installations have been performed primarily at MFC and CFA. Continued meter installations will be prioritized by the potential of the building to meet the Guiding Principles and the cost effectiveness of installing meters to meet the 90% metering goal.

In the latest Facilities Information Management System (FIMS) snapshot, the INL Site has over 900 real property assets such as facilities and structures, all of which potentially use electricity. The INL Site will continue to use DOE guidance and economic analysis to determine the most logical buildings to meter.

INL anticipates meeting the Guiding Principles on 27 facilities, which account for 15% of the enduring facilities at INL for both Nuclear Energy (NE) and EM programs. INL also anticipates meeting the goal to meter 90% of NE electric energy consumption by installing metering on an additional 15 facilities. In some cases, metering installations are common to both of these two separate metering related goals.

#### 2.2.1 Performance Status

#### **Metering for Guiding Principles**

INL anticipates meeting the Guiding Principles on 27 facilities, which account for 15% of the enduring buildings for both NE and EM. Twenty-one of these facilities are currently metered. Three of the 21 facilities had new meters installed during FY 2012: two at CFA and one new building at MFC.

#### Metering for the 90% Goal

Thirty-nine buildings in Idaho Falls and 41 buildings at the desert site are currently metered. These 80 buildings represent 49% of the total INL Site electric energy being metered. As funding is available, and priorities determined, there are an additional 70 buildings available for metering that would raise the total INL buildings metered to 150.

All INL Idaho Falls town locations are currently metered for electricity and natural gas. In FY 2012, advanced metering was installed on 16 of the Idaho Falls town facilities through a project sponsored by Idaho Falls Power. In addition, the new Energy Systems Laboratory (ESL) was constructed in FY 2012 with plans to occupy early in FY 2013. The ESL facility contains significant metering and sub-metering intended to allow the facility manager precise control of building systems and to allow processes to be metered independently of the building energy use. With the new ESL facility, there will be 24 facilities counted in FY 2013 as having advanced metering and 16 facilities with standard meters for a total of 40 metered facilities.

Forty-one buildings at the desert site are currently metered, representing 39% of the desert site electricity metered. Twenty-six buildings are metered at MFC, five buildings are metered at CFA, one building is metered at the historic Experimental Breeder Reactor 1 (EBR-1) facility, and one building is metered at the ATR Complex. In addition, eight buildings at the ATR Complex are metered together as a process and are currently listed as INL's only Excluded Facilities for the energy efficiency goals. Thirty-two of these facilities are metered with advanced meters, with the remaining nine metered with existing standard metering.

Using a combination of the DOE Metering Guidance (memorandum from Jennifer C. MacDonald, Director, Sustainability Performance Office, May 6, 2011), the guidance for Electric Metering in Federal Buildings (DOE/EE-0312), the DOE Buildings Electric Metering Guidance of September 27, 2006, and the FEMP Metering Best Practices (October 2007), the INL FY 2011 Metering Plan (PLN-3911) was prepared to identify the appropriate buildings for installing new utility metering. The INL Site will only install meters on facilities that have the greatest potential of achieving Guiding Principle compliance, are greater than 5,000 ft<sup>2</sup>, are not cold, dark, and dry, and will be in use after FY 2020.

The INL Metering Plan spreadsheet tools were updated in FY 2012 to reflect final actual FY 2011 energy usage to determine the number of facilities needed to be metered to meet the 90% goal for just NE facilities and for all INL Site facilities. The spreadsheet tools indicated that an additional 15 buildings still require metering for NE to meet the 90% goal for NE electrical use. Of these 15 facilities, up to 12 may be metered by ESPC Project 3 and the final three meters should be installed at SMC facilities.

DOE-EM indicates that up to 12 facilities may be metered by EM if funding is available. These 12 moderately sized facilities are the only buildings that EM is currently planning to meter due to uncertainty of the operating life for most EM facilities. If these 12 buildings are metered, and if NE meters all of the 56 NE buildings meeting the metering guidance, the spreadsheet tools calculate that only 71% of the total INL Site electric usage can be metered. The only way to exceed this 71% is to meter many smaller NE buildings and/or meter EM buildings with NE funding.

#### 2.2.2 Planned Actions

#### Metering for the Guiding Principles

The three facilities that had new meters installed during FY 2012 will be monitored and the data compiled for input into the Environmental Protection Agency (EPA) Portfolio Manager online tool to determine a score for energy use. This score will then be used to validate the buildings energy performance for the Guiding Principles.

To achieve Guiding Principle compliance, six remaining buildings of the 27 still need to have metering installed. Five of these remaining meters are planned for installation in FY 2013 by ESPC Project 3 and the final meter will be on the newly constructed Research and Education Laboratory (REL) that be occupied in early FY 2014.

#### Metering for the 90% Goal

Two new facilities will be added to the INL inventory. The ESL will be counted beginning in FY 2013 and the new REL will be completed and added in FY 2014. Both of these facilities are planned to be certified as LEED<sup>TM</sup> Gold and will have extensive metering including advanced metering by the City of Idaho Falls.

The Metering Plan spreadsheet tools indicate that an additional 15 NE buildings require metering to meet the 90% Goal for NE. Installations are planned as follows:

- 12 facilities at CFA, MFC, and ATR Complex Included in ESPC Project 3
- Three facilities at Test Area North (TAN) Need to be installed through a work for others contract
- DOE-EM plans to install meters on up to 12 facilities if EM funding is available.
  - Total metering for the INL Site is summarized as follows:
- If only NE facilities are considered, 80 facilities are currently metered, two new Idaho Falls facilities will be added, and 15 additional meters must be installed to reach the 90% goal for a total of 97 meters.
- If the entire INL Site is considered, 80 facilities are currently metered, two new facilities will be added, 12 EM facilities will be metered, and 56 additional NE buildings are available to be metered for a total of 150 metered facilities to account for 71% of the INL Site's electric usage.

In addition to providing a means of trending and validating energy savings, metering also provides proactive space management opportunities. Building energy and water usage information assists with maintenance scheduling, enhanced resource utilization, and accurate space charge-back to building tenants. Advanced metering provides a method to encourage and validate employee behavior change, and provides a dependable tool for facility managers to tune building systems and controls.

#### 2.3 Cool Roofs

Cool roofs, unless uneconomical, for roof replacements unless project already has CD-2 approval. New roofs must have thermal resistance of at least R-30.

#### 2.3.1 Performance Status

In FY 2012, INL replaced 21,869 ft<sup>2</sup> of roofing on MFC-768 Section J (MFC Power Plant), TRA-614 (Office Building/Bunkhouse/Dial Room), TRA-620 (Office Building), and TRA-670 Sections H through K (Advanced Test Reactor Building) with new roofing that meets the Secretary of Energy's requirements for "cool roofs" and eliminated over \$260k of deferred maintenance. Additional "cool roofs" totaling 69,372 ft<sup>2</sup> were installed as part of the new construction for the new MFC Dial Room

(MFC-1728), the Irradiated Materials Characterization Lab (IMCL, MFC-1729), the Energy Systems Lab (IF-685), and seismic upgrades to the MFC Analytical Lab.

A total of 379,000 ft<sup>2</sup> or 17% of DOE-NE owned and operating INL roof area now have cool roofs.

#### 2.3.2 Planned Actions

INL will continue to use the DOE-National Nuclear Security Administration (NNSA) RAMP program to install an additional 7,200 ft<sup>2</sup> of roofing in FY 2013 that meets the DOE "cool roof" requirement and will incorporate "cool roof" requirements into non-RAMP roof replacements as part of new construction and normal INL roof replacement and maintenance program.

In addition, INL will complete construction of the new REL at the Idaho Falls Campus in FY 2013. The total square footage of cool roof planned to be installed in 2013 is 51,000 ft<sup>2</sup>.

The ICP contract extension identifies a currently unfunded project to evaluate Cool Roof technology when INTEC building roofs are replaced or significantly modified. In particular, CPP-666 was identified to apply Cool Roof technology when roofing maintenance is performed.

## 2.4 HPSB Existing Buildings

15% of existing buildings greater than 5,000 gross square feet (gsf) to be compliant with the five Guiding Principles of High Performance Sustainable Buildings (HPSB) by FY 2015.

There are 27 Guiding Principles in five categories. To achieve compliance with the Guiding Principles, all 27 must be met.

As indicated in the FIMS database, the INL Site has 168 buildings that are appropriate to consider for audits and upgrades to implement the Guiding Principles. Fifteen percent of these buildings calculates to a minimum of 26 buildings that must meet the Guiding Principles by FY 2015. INL has selected 27 buildings with the highest probability of meeting the Guiding Principles. Of these 27 buildings, one is LEED<sup>TM</sup> Certified, one is LEED<sup>TM</sup> Gold certified, and four are pending LEED<sup>TM</sup> Gold certification. The remaining 20 buildings will be targeted for the Guiding Principles compliance path.

#### 2.4.1 Performance Status

The LEED<sup>TM</sup> Construction package for the new Radiological Environmental Sciences laboratory (IF-683) was submitted during FY 2012.

Metering was installed on three facilities (two at CFA, and one at MFC) so that electrical data can be compiled for entry into Portfolio Manager. Energy and water reduction projects were completed in FY 2012 for IF-601, IF-602, IF-616, and IF-654 to further enhance the Energy Star grading for implementation of the Guiding Principles in these facilities.

INL documented compliance with 15 of the 27 Guiding Principles.

#### 2.4.2 Planned Actions

INL Site facilities selected to meet the Guiding Principles do not include buildings owned by EM. Since the EM mission at the INL Site is to reduce footprint and complete the cleanup, the existing building life is either too short or too uncertain to invest in upgrades. This presents a challenge because the INL Site as a whole must meet the 15% goal (26 buildings) as noted above. INL identified 27 INL facilities (1 more than the required 26) that have the highest probability of fully implementing the Guiding Principles. However, this is 11 facilities above the original INL target of 16 facilities (15% of the INL total) and is unlikely to occur by FY 2015 without additional project funding. All 27 facilities are listed in Table 3. This table includes information on metering and the year each building is expected to meet the Guiding Principles based on preliminary engineering evaluations. This table will be used as the work plan for prioritizing and managing the certification process for these identified buildings.

If funding becomes available in FY 2013, INL will further enhance the Energy Star rating for the identified facilities and assist with overall energy reductions for the entire INL Site by installation of up to eight energy reduction projects at the SMC, MFC, and the Idaho Falls facility areas. These projects require an estimated \$1.2M to construct and were developed during FY 2012 for implementation in FY 2013 with INL SIF.

- 1. SMC Air Handler Heat Recovery Loop
- 2. IAB Building Automation System and Lighting Controls
- 3. IORC Liebert System (9) Economizers
- 4. IF-603 VFCs and Controls
- 5. EROB Exterior Lighting
- 6. WCB Exterior Lighting
- 7. IRC Exterior Lighting
- 8. MFC Lighting Controls (500 Occupancy Sensors).

In FY 2013, INL will continue to develop additional projects for FY 2014 funding that will upgrade selected facilities in Table 3 to meet the Guiding Principles by the planned date. In addition, the CFA and ATR Complex buildings are targeted by ESPC Project 3 for Energy Conservation Measures (ECM) that will help these facilities meet the Guiding Principles.

The remaining 12 procedure oriented Guiding Principles will be documented for all buildings on Table 3 to achieve compliance by FY 2015.

Table 3. Buildings planned to meet Guiding Principles.

Building	Metered	iVu*	Water Metered	Guiding Principle Compliant	Comments
REL	2014	2014	2014	2015	LEED <sup>TM</sup> Gold in FY 2015
ESL	Yes	Yes	Yes	2013	LEED <sup>TM</sup> Gold in FY 2013
IMCL	Yes	Yes	Yes	2014	LEED <sup>TM</sup> Gold in FY 2013
IF-665 (CAES)	Yes	No	Yes	Yes	LEED <sup>™</sup> Gold
IF-683 (RESL)	Yes	Yes	No	2013	LEED <sup>TM</sup> Gold in FY 2013
TRA-1608 (TSB)	No	No	No	Yes	LEED <sup>TM</sup> Certified
TRA-1626 (TTAF)	Yes	Yes	No	2014	Meets LEED <sup>TM</sup> Certification Except for Energy Use (further analyzing for Energy Star score)
IF-601	Yes	Yes	No	2013	
IF-602	Yes	Yes	No	2013	
IF-616	Yes	Yes	Yes	2013	
IF-654	Yes	Yes	Yes	2013	
IF-663	Yes	Yes	No	2013	
IF-680	Yes	No	2013	2014	Water Meter by City of Idaho Falls
IF-684	Yes	No	2013	2014	Water Meter by City of Idaho Falls
CF-1611	Yes	Yes	No	2013	N 40

Table 3. (continued).

Building	Metered	iVu*	Water Metered	Guiding Principle Compliant	Comments
CF-1612	Yes	Yes	No	2013	
CF-1618	Yes	Yes	No	2013	
CF-612	2013	2013	No	2015	
CF-615	2013	2013	No	2015	
CF-621	Yes	Yes	No	2015	
CF-623	Yes	Yes	No	2015	
CF-696	2013	2013	No	2015	
CF-698	2013	2013	No	2015	
MFC-710	Yes	No	No	2014	Need to Access ESPC Installed Meter
MFC-725	Yes	No	No	2014	Need to Access ESPC Installed Meter
MFC-782	Yes	No	No	2014	Need to Access ESPC Installed Meter
TRA-628	2013	2013	No	2014	
* iVu is a Carrier bu	ilding control sy	stem through	which INL tr	acks and compile	es meter data.

#### 2.5 HPSB New Construction

All new construction, major renovations, and alterations of buildings greater than 5,000 GSF must comply with the Guiding Principles and, where the work exceeds \$5M, each are  $LEED^{TM}$ - NC Gold certification or equivalent.

The INL Site is implementing High Performance Sustainable practices and design specifications in new building design and construction by introducing High Performance Sustainable design criteria at conceptual design and following though during design and construction by using LEED<sup>TM</sup> construction concepts and the Guiding Principles for High Performance Sustainable Buildings.

The INL Site also constructs buildings that are very mission specific and are not readily compatible with LEED<sup>TM</sup> or with the Guiding Principles. One new such facility is IWTU at INTEC that completed Conceptual Design (CD) Level 4 in FY 2012. Due to the mission of this facility and its energy use characteristics, the internal process at this facility will consume most of the metered energy. The IWTU was also at CD Level 2 before the LEED<sup>TM</sup> Gold requirement was implemented.

INL new construction includes DOE-owned and privately leased facilities. All existing leased facilities are privately owned. INL has no General Services Administration (GSA)-leased facilities.

#### 2.5.1 Performance Status

Construction of the new Radiological and Environmental Sciences Laboratory (RESL) was completed in FY 2011 and LEED<sup>TM</sup> Gold certification is expected in FY 2013.

Construction was completed on the new IMCL in FY 2012 and is expected to be LEED<sup>TM</sup> Gold certified in FY 2013.

Construction was essentially completed on the new ESL in late FY 2012 and is expected to be LEED<sup>TM</sup> Gold certified in FY 2013.

#### 2.5.2 Planned Actions

LEED<sup>TM</sup> Gold certification is planned for the three facilities listed above in FY 2013. In addition, construction of the new REL is expected to be complete in FY 2013 with LEED<sup>TM</sup> Gold certification expected in FY 2014.

These four facilities will be assumed to be fully Guiding Principle compliant upon receipt of LEED<sup>TM</sup> Gold certification.

ICP has plans to renovate MFC-799 (7,329 ft<sup>2</sup>), Sodium Treatment System, identified in ICP contract extension and is planned for startup by September 30, 2015, and MFC-793 (3,809 ft<sup>2</sup>) planned for startup by September 30, 2016. Both are subject to Section I.81, Changes Clause in the ICP Contract Mod 231. Neither building will be subject to LEED<sup>TM</sup> design criteria, but both will be subject to implementing the Guiding Principles as far as is cost effective.

AMWTP does not project any new building starts within the remaining duration of the current contract.

# 2.6 Renewable Energy

7.5% of annual electricity consumption from renewable sources by FY 2013 and thereafter (5% FY 2010–2012).

The INL Site continues to actively pursue Renewable Energy Generation capability and purchase of renewable energy through the local utility and is annually purchasing Renewable Energy Certificates (RECs) in amounts as outlined in the Energy Policy Act of 2005.

The goal for onsite renewable energy generation and direct purchase of new renewable electricity is not likely to be met due to the low cost of electricity from abundant older hydroelectric and coal sources and limited availability of renewable electricity from local utilities. The payback for renewable energy projects was evaluated during the development of ESPC Project 3 at 211 years for photovoltaic and 60 years for a single wind turbine. Onsite renewable energy generation is unlikely to be successful without supplemental funding to support such projects.

#### 2.6.1 Performance Status

There is one solar transpired wall at the IRC Records Storage Facility. This wall preheats outside fresh air for the office area of this facility. Two other transpired solar walls were installed in FY 2010 as part of the MFC ESPC project. These solar walls provide renewable energy that avoids the use of conventionally generated electricity. Although solar walls avoid other energy use and are a renewable source, they do not contribute to meeting this goal.

The INL Site procured 22,000 MWh of Wind Generated RECs from Idaho Falls Power at a total cost of \$22,000. This preferential purchase of new renewable energy represents 9.9% of the INL Site's electric usage in FY 2011 and is the purchase for FY 2012.

#### 2.6.2 Planned Actions

Low energy costs benefit the INL Site, allowing for increased strategic missions and facility enhancements. However, cost benefit analyses generally lead decision makers to place a lower priority on installation of renewable energy projects.

During ESPC contract negotiations, existing lease updates, and new lease negotiations, installation of renewable energy generation is considered and payback evaluated. The proposed ESPC Project 3 is unlikely to result in renewable energy generation projects (wind or solar) due to the cost and long return on investment. The Energy Savings Company was not able to identify any projects that would cumulatively produce the electricity necessary to meet the goal of 7.5% of INL Site electric use or even 3.75% onsite renewable energy generation. INL research and development (R&D) continues to

investigate the potential installation of numerous renewable energy technologies, but INL will not invest limited funding into renewable projects that are not economically viable or mission compatible.

The INL Site could meet the onsite renewable energy generation goal if funding is secured to support renewable energy installation on the INL Site. However, if funding is not obtained, the goal will not be met.

The INL Site will continue to meet minimum requirements of purchasing at least 7.5% of the electric energy usage in equivalent RECs. INL has committed to increase purchase of RECs starting in FY 2012 and thereafter to 10% of the INL electric usage. Although the increase does not contribute to the GHG reduction goal, it does demonstrate INL's commitment to climate change adaptation and strategic leadership. INL has also committed to maximize the purchase of locally generated Green Power RECs.

#### 2.7 REGIONAL AND LOCAL PLANNING

Executive Order 13514 instructs federal agencies to meet the following regional and local planning goals:

- Participate in regional transportation planning and recognize existing community transportation infrastructure
- Align federal policies to increase the effectiveness of local planning for energy choices such as locally generated renewable energy
- Ensure that planning for new federal facilities or new leases includes consideration of sites that are pedestrian friendly, near existing employment centers, accessible to public transit, and emphasize existing central cities and, in rural communities, existing or planned town centers
- Identify and analyze impacts of energy use and alternative energy sources in all Environmental Impact Statements and Environmental Assessments for proposals for new or expanded federal facilities under the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.)
- Coordinate with regional programs for federal, state, tribal, and local ecosystem, watershed, and environmental management.

#### 2.7.1 Performance Status

As the INL Site primary contractor responsible for land management and sitewide leadership, INL maintains excellent relationships with local community planning and government groups, including the cities of Idaho Falls, Blackfoot, Arco, and Pocatello, as well as the counties of Bonneville, Butte, Bingham, and Bannock. Interactions include transportation infrastructure, facility planning locations, traffic patterns, and future infrastructure needs. When warranted, the community is involved and encouraged to supply feedback to decision makers during any National Environmental Policy Act public process.

Although limited, existing community transportation infrastructure usage is encouraged and INL works with multiple local and state agencies on transportation planning by providing input and sponsoring awareness events to promote employee-commuting ridership. In FY 2012, INL continued working with local transportation companies to coordinate a schedule for riders to the Blackfoot and Pocatello areas.

The bicycle remains a popular seasonal method of commuting at the Idaho Falls campus with increasing awareness of personal fitness and energy conservation. Facilities have designated bicycle spaces and INL continues to explore the possibility of covered parking for cycling and motorcycle commuters.

Sustainable Site development encompasses an integrated approach during the refurbishment and planning of future onsite facilities and infrastructure, consistent with the INL TYSP. INL encourages walking and bicycling as means of travel within Site boundaries; long-range Site development envisions continuous improvement of a bicycle and pedestrian-friendly environment.

INL continues to work with the following local planning organizations:

- Idaho Strategic Energy Alliance
- Yellowstone Business Partnership (INL representative is on the Board of Directors)
- Yellowstone-Teton Clean Cities Collation
- Bonneville County Transportation Committee
- Targhee Regional Public Transportation Authority.

#### 3. FLEET AND FUEL MANAGMENT

#### 3.1 Fleet Alternative Fuels

10% annual increase in fleet alternative fuel consumption by FY 2015 relative to an FY 2005 baseline.

The INL Site is developing diversified strategies for increasing alternative fuel consumption and reducing carbon emissions associated with light and heavy-duty vehicles. One of the DOE Order 436.1 transportation fuels goals is to increase the use of alternative fuels by 10% annually, as compared to the FY 2005 usage baseline. There are many opportunities to affect DOE's alternative fuel consumption by implementing fuel-switching activities at INL.

#### 3.1.1 Performance Status

In FY 2012, the INL Site used 194,429 gasoline gallon equivalents of alternative fuels. This represents an increase of 154% over the FY 2005 use. These usages are a compilation of all INL Site contractors and the total of each of the various alternative fuels as reported into the Fleet Automotive Statistical Tool (FAST) database.

The INL Site is actively pursuing E-85 fuel and B20 usage. INL has increased the availability of E-85 and mandating its use while researching and implementing the use of B20 in the INL bus fleet throughout the year and across varied climate conditions.

Completed activities include:

- Increased the availability of alternative fuel by converting petroleum tanks to alternative fuel tanks and by encouraging the use of alternative fuel by all users of flex fuel vehicles.
- Updated the existing fueling infrastructure and provided additional alternative fuel locations to allow for improved fuel use tracking and control. Used a new technology, Radio Frequency Identification (RFID) fuel rings, also called "ring technology," making it easier to fuel INL vehicles by automatically capturing mileage and other data that employees once had to enter manually.
- Partnered with a local fuel distributor to make E-85 commercially available to east Idaho.
- Reported to flex fuel vehicle owners (quarterly) their percentage of E-85 usage compared to unleaded usage and encouraged the use of the appropriate flex fuel. This method of encouraging self-governing through information has led to increases in E-85 fuel use.
- Replaced the INL bus fleet with 52 new motor coaches that run on B20 and have improved fuel mileage by up to 50% (3 mpg to 6 mpg).

- Selected by GSA to receive three American Recovery and Reinvestment Act (ARRA) funded Parallel
  Hybrid drive shuttle buses to replace three 24-year-old buses. These new buses reduce petroleum use
  through greater efficiency and use B20. In FY 2012, the new buses were used on lightly loaded
  commuter routes and for shuttle and tour service.
- Researched methods to use B20 in the bus fleet year around.
   Ongoing activities include:
- Continued efforts to right size the fleet with more flex-fuel vehicles capable of using E-85.
- DOE-ID and INL continued collaborating with the Yellowstone-Teton Clean Energy Coalition (local
  area Clean Cities program) to encourage and cooperate with local fueling stations and vendors to
  provide alternative transportation and fueling stations in the area.
- AMWTP has historically operated 89 passenger carrying light-use vehicles for transportation of
  personnel and goods to the desert site, though the fleet was reduced by 17 vehicles this year. The fleet
  consists of minivans capable of transporting up to six individuals. This small fleet averages over
  2 million miles a year transporting approximately 500 personnel to and from car-pool locations in
  local community areas surrounding the INL Site.
- Each vehicle in the AMWTP fleet is an alternative fuel vehicle (AFV), and capable of using unleaded regular or E-85 as a fuel. Use of the Idaho Falls E-85 commercial fueling station continued through FY 2012. Employee commute vanpools based in Idaho Falls were requested by AMWTP management to use the E-85 fuel. Initially, these actions resulted in approximately 50% of total fleet using E-85. For FY 2012 the annual utilization of E-85 was approximately 23%. The reduction in use of E-85 was directly attributed to reliability issues with the van fleet during the colder months (November through April). AMWTP did manage to reach 44% utilization of E-85 during those months during which the region sees average low temperatures greater than the freezing point. In fact, the AMWTP fleet again exceeded 51% utilization of E-85 during June of 2012. Were it not for winter reliability issues, AMWTP would continue to meet the 10% annual increase in fleet alternative fuel consumption by FY 2015 goal.
- Transferring a portion of the AMWTP workforce to the INL bus system represents an additional increase in the utilization of alternative fuels as some of the vans, which were removed from the fleet did not use E-85. Occupants transferred from those vehicles that did not use E-85 are now carried by INL buses, which use B20.

#### 3.1.2 Planned Actions

Additional increases in the use of alternative fuels will be obtained through numerous INL Site identified projects and activities that include:

- Continue researching the potential conversion of the INL bus fleet to alternative fuel types.
- Continue to track and trend reliability, fuel usage, and optimize performance of new B20 compatible buses while evaluating future purchases.
- Continue to encourage and establish process to stimulate the use of E-85 in flex-fuel vehicles at the
  end user level. This includes individual goal setting at an organization level and holding individuals
  accountable for non E-85 fuel purchases.
- Replace fleet heavy trucks and equipment with new equipment that will run on B20.

#### 3.2 Fleet Petroleum Fuels

2% annual reduction in fleet petroleum consumption by FY 2020 relative to a FY 2005 baseline.

The INL Site is developing diversified strategies for reducing fossil fuel use and carbon emissions associated with light and heavy-duty vehicles. One of the DOE Order 436.1 transportation fuel goals is to reduce petroleum fuels by 2% annually through FY 2020 (30% total reduction), as compared to the FY 2005 usage baseline. There are many opportunities to affect DOE's petroleum fuel usage by implementing fuel reduction and fuel switching activities at INL.

#### 3.2.1 Performance Status

In FY 2012, the INL Site used 747,777 gasoline gallon equivalents, a 20.3% reduction from FY 2005. This usage is a compilation of all INL Site contractors and the total of gasoline and diesel fuels as reported into the FAST database.

Completed activities include:

- Increased overall bus efficiencies by implementing express routes and eliminating underutilized routes. This was in conjunction with continued efforts in right sizing the fleet with more flex-fuel vehicles and hybrids.
- Incorporated the Park and Ride concept to reduce bus fuel usage, and developed additional Park and Ride lots for employees at outlying locations.
- Used innovative technology to track and reduce fuel usage such as Global Positioning System (GPS), RFID fuel rings, and data logger technology to monitor engine performance and driver habits.
- Replaced the INL bus fleet with 52 new motor coaches that run on B20, and have improved fuel mileage by up to 50% (3 mph to 6 mph).

Ongoing activities include:

- Continue research methods to use biodiesel blends in the bus fleet year around, reducing the need for 100% diesel.
- Continue the Reduce Idle Campaign that is saving fuel by better managing idling times. Results are positive as this campaign is saving 1,400 gallons of fuel per month.
- Continued efforts to right size the fleet with more fuel-efficient vehicles.
- As AMWTP has operated its van pool commuter fleet to meet alternative fuel use goals, it has also
  contributed to a corresponding reduction in petroleum fuel use. Additionally, as noted in Section 3.4,
  the reduction of the AMWTP fleet represents a sizeable reduction in the use of traditional petroleum
  fuels.

#### 3.2.2 Planned Actions

Additional reductions in petroleum-based transportation fuels will be obtained through numerous INL Site identified projects and activities that include:

- Add one additional Park and Ride location to further reduce employee commute and bus fleet fuel usage.
- Anticipate a reduction in petroleum usage as AMWTP comes to a close. Additionally, several pieces of heavy equipment will be consolidated further to reduce vehicle inventory and fuel usage.
- Evaluate technology that will allow INL to operate the bus fleet on "mixed" fuel, which is a combination of CNG and biodiesel. This may allow INL to reduce fuel usage by up to 30%.

• Implement Federal Commuter Tax Credit for employees who chose to carpool to work. Continue to encourage the use of teleconferencing and trip consolidation to reduce miles traveled.

#### 3.3 Fleet Vehicle Purchases

75% of light-duty vehicle purchases must consist of alternative fuel vehicles (AFV) by FY 2000 and thereafter.

INL procures light-duty fleet vehicles almost exclusively through the GSA vehicle-leasing program. Maximizing the use of this GSA program is at the forefront of INL plans to achieve this goal. A rotation schedule based on vehicle age and mileage determines when vehicles are returned to GSA. When currently allocated vehicles are due for replacement, the old vehicle is replaced with an AFV or hybrid vehicle from GSA. There are currently very few exceptions for receiving conventional vehicles. Examples include some emergency response vehicles and heavy-duty full-size pickups. However, DOE Headquarters (HQ) has directed that hybrid vehicles (which are not AFV vehicles at this time) be procured when available. This greatly impacts the 75% AFV target.

#### 3.3.1 Performance Status

The INL light-duty fleet is comprised of 378 vehicles of which 55 are AFV, 209 are E-85, and 58 are gas/electric hybrids. The INL Site acquired nine light-duty vehicles in FY 2012, all of which are flex-fuel (100%), none are hybrid, and none are gasoline.

The INL light-duty fleet was reduced an additional 13 vehicles for cost reduction and through fleet rightsizing initiatives.

An all-electric Polaris Ranger was tested at two remote locations for feasibility and practicality as a replacement for different brands of Utility Terrain Vehicles (UTV). The test was successful as operators enjoyed the quiet ride and power. Finding an outlet for recharge was occasionally difficult, but once locations were identified it became inconsequential. Early indications also point to lower maintenance costs. The purchase price of \$16K places this model at the top of the UTV price range and may take years to recoup the savings the all electric models provide.

#### 3.3.2 Planned Actions

A survey will be sent out to all INL light vehicle custodians to ensure the vehicle is being used in accordance with the vehicle justification form. This survey will help ensure accurate information is gathered and mission critical vehicles are excluded from ongoing vehicle reductions measures. The goal is to reduce the light-duty fleet further by approximately 100 vehicles.

# 3.4 Fleet Inventory Sizing

Reduce fleet inventory by 35% within the next 3 years (end of FY 2013) relative to a FY 2005 baseline.

#### 3.4.1 Performance Status

The INL Site and DOE-ID committed to meet the 35% reduction goal by FY 2013 and met the goal one year early, reducing vehicle inventory by 148 units.

In January 2012, INL entered into a partnership with GSA to acquire 52 new buses. The buses started arriving in March. With the addition of the 52 new GSA-leased buses, INL eliminated 52 owned, inefficient buses from the fleet and increased capacity from 44 passenger buses to 55 passenger buses. The reliability of the new buses allowed INL to reduce the number of spares buses kept "road ready" during starting and maintenance issues.

INL was able to reduce the heavy equipment pool by 60 pieces of equipment. This was accomplished through monitoring equipment usage, fleet equipment advisory group input, and using the J-hook heavy truck system of using multiple beds for one truck.

AMWTP reduced its van fleet by 17 vehicles during the fiscal year by transferring a portion of the workforce residing in Idaho Falls to the INL bus system. This represents nearly a 20% reduction in the size of the AMWTP van fleet as the INL bus system did not need to add vehicles to accommodate the addition of this portion of the AMWTP workforce.

#### 3.4.2 Planned Actions

INL will allocate the majority of equipment to the end user except for a small centralized fleet of approximately 100 pieces of equipment. In doing so, the custodian will be accountable for cost, acquisition, maintenance, and storage of the equipment. However, Fleet Management will maintain input on all equipment acquisitions.

INL is planning a strategic reduction of 100 vehicles (20%) in FY 2013 to better reflect mission need, resolve budget challenges, and support complex wide goals.

#### 4. WATER USE GOALS

#### 4.1 Water Use Reductions

26% water intensity reduction by FY 2020 from a FY 2007 baseline

The INL Site's goal for water usage is a 16% reduction of usage intensity by FY 2015, or 2% each year, as compared to the FY 2007 Water Usage Intensity Baseline measured in gallons per square foot (gal/ft²).

Due to the nature of the various INL Site missions, many of the operations can be cyclical and result in varying usages of water throughout the year and from year to year. In addition, as facilities are removed and processes are shut down, the lower square footage can actually result in an increase in water use intensity even as overall water usage is reduced.

The water intensity reduction goal will be very difficult for the INL Site to accomplish. Long payback calculations based on inexpensive water and electric rates make water saving projects cost ineffective. Water usage is so dependent upon process usage and events or activities such as wildfires and D&D or construction work, that this goal will be very difficult to obtain.

#### 4.1.1 Performance Status

As per the water reduction goals found in DOE 436.1, the INL Site should be at a 10% water intensity reduction at the end of FY 2012 when compared to the FY 2007 Reportable Water Usage Baseline. The INL Site used a total of 858.9 million gal of water in FY 2012, resulting in a water usage intensity of 154.0 gal/ft², a decrease of 11.4% over the FY 2007 baseline (173.9 gal/ft²). However, as demonstrated through water use and building square footage data entered into the CEDR, the INL Site total water used has decreased from 1,050.9 million gal in FY 2007 to 858.9 million gal in FY 2012, for a total water used reduction of 18.3%.

Construction was completed on the new ESL facility, which incorporated significant xeriscaping, efficient water fixtures, and water sub-metering. This facility is expected to be a low water user and help to lower the INL Site water use intensity. In addition, all water fixtures in the IRC Office Building (IF-602) were replaced with new low-flow fixtures.

#### 4.1.2 Planned Actions

Other projects that will continue to contribute to water use reductions for the INL Site include several ongoing tasks:

- Leak analyses will continue at all areas of the Site.
- INL and ICP will continue purchasing Environmental Protection Agency WaterSense or other water efficient products, which will be documented by Sustainable Procurement processes.
- ESPC Project 3 planned for CFA and the ATR Complex may eliminate once-through HVAC cooling water, increase efficiency through fixture replacements, locate and repair leaking water lines, and possibly reduce industrial water use at the ATR Complex.
- The new REL facility in Idaho Falls is scheduled to be completed in 2013. This LEED<sup>TM</sup> Gold facility, similar to the ESL, should be a low water user by incorporating xeriscaping concepts and low-flow water fixtures while adding over 239,000 ft<sup>2</sup> of space to the water intensity calculation.
- EM missions, as noted in the CEDR, will contribute to water reductions as facility missions are complete. These include the AMWTP complex of facilities being cold, dark, and dry.

Based on the previous cost of the MFC ESPC that resulted in a 5% water reduction and the proposed ESPC at the ATR Complex and CFA, additional water reduction implementation at the INL Site could cost between \$40M and \$50M. Projects include:

- Replace all high-water use faucets, toilets, showerheads, and urinals across the INL Site.
- Upgrade ATR cooling tower.
- · Detect and repair underground leaks.
- Re-route ATR Complex air compressor cooling water disposal paths.
- Reduce ATR Complex sewage lagoon size.
- Replace all inefficient domestic hot water heaters across the INL Site.

#### 4.2 ILA Water Use Reductions

20% water consumption reduction of industrial, landscaping, and agricultural (ILA) water by FY 2020 from a FY 2010 baseline.

ILA water is not applicable to the INL Site. All water obtained by the INL Site is obtained from the Snake River Plain Aquifer and is potable. The INL Site does not have access to any non-potable water supplies.

#### 4.2.1 Performance Status

N/A.

#### 4.2.2 Planned Actions

N/A.

#### 5. WASTE MINIMIZATION

#### 5.1 Landfill Waste Diversion

Divert at least 50% of non-hazardous solid waste, excluding construction and demolition debris, by FY 2015.

"The INL Site Pollution Prevention Plan" (DOE/ID-10333) describes the pollution prevention practices pursued at the INL Site. INL continued the co-mingled recycling and paper shredding programs at the desert site facilities (CFA, MFC, and ATR Complex) during FY 2012. INL is also working with INL Site contractors to expand co-mingled recycling at other site facilities. All INL employees are capable of participating in the co-mingled recycling program that allows employees to place a variety of recyclable materials into one collection bin. ICP also has co-mingled recycling at town facilities and paper recycling at the desert site facilities. Additionally, ICP is working on implementing co-mingling at INTEC in FY 2013 and is pursuing composting waste diversion for ICP cafeteria consumables.

With the exception of SMC, all town and desert site employees have the option to participate in the paper shredding recycling program, which includes regular office paper and controlled unclassified information (CUI) materials for shredding. In FY 2012, INL facilities recycled 219,256 lbs of co-mingled materials and 402,820 lbs of office paper and cardboard. Additionally, INL diverted or recycled another 401,055 lbs of materials, including scrap metal, wood, cooking oil, compostables, and wood pallets. This accounts for approximately 32.8% diversion of municipal solid wastes collected at INL facilities.

The INL Site continues to utilize a number of processes to reduce the quantity and toxicity of hazardous chemicals. The processes follow the simple reduce, reuse, and recycle steps to help achieve the overall goal. The INL Site utilizes chemical coordinators and environmental personnel to help ensure the requested materials are actually needed, are not available through an exchange/sharing program, and the smallest/most appropriate quantity is being ordered. INL also stipulates the use of Massachusetts Institute of Technology (MIT) Green Chemical alternatives list at (<a href="http://web.mit.edu/environment/academic/alternatives.html">http://web.mit.edu/environment/academic/alternatives.html</a>) to help chemical coordinators identify "greener" alternatives to chemicals being requested. Researchers at the IRC are networked together by the chemical coordinator if one researcher needs a small quantity of a particular chemical that already exists at INL. This program helps ensures that the chemicals are used for the intended purpose ensures.

"greener" alternatives to chemicals being requested. Researchers at the IRC are networked together by the chemical coordinator if one researcher needs a small quantity of a particular chemical that already exists at INL. This program helps ensure that the chemicals are used for the intended purpose, ensures continuous turnover of the inventory, reduces the time to get a chemical, and saves the researcher money in not having to purchase a chemical. Chemical coordinators actively search for existing inventory to preclude new purchases. INL also participated with other national laboratories to establish a chemical reduction guidance that will outline more specific steps and reduction goals for INL. INL has also worked with Procurement to screen subcontractor's procurement requirements to ensure that less-hazardous chemicals are utilized when available and life-cycle costs are considered prior to purchase. INL and ICP are working actively and continually towards improvement in reduction of inventories through the avenues of acquisition, use, and disposal.

The INL Site Hazardous Waste Management Act (HWMA)/Resource Conservation and Recovery Act (RCRA) Permit requires that all operating contractors conduct and complete a source reduction evaluation review and written plan, in accordance with the procedures and format provided in the "EPA Waste Minimization Opportunity Assessment Manual" (EPA/625/7-88/003). This review and plan was submitted to the Idaho Department of Environmental Quality on March 31, 2011 and every 4 years thereafter, and must include detailed descriptions of any programs the contractors may have to assist generators of hazardous and mixed waste in reducing the volume (quantity) and toxicity of wastes produced.

AMWTP reduces and minimizes the quantity and toxicity of hazardous chemicals and materials through a procurement process that stresses environmentally preferable purchases. One of the objectives stated in the AMWTP management procedure for the acquisition of material and services is to use

recycled-content and bio-based content materials and other environmentally preferable products and services to the maximum practicable extent. Purchase requisitions are screened by an assigned procurement specialist for environmentally preferable materials.

AMWTP has also evaluated possibilities with the use of Value Engineering activities throughout the year to identify materials that have been initially dispositioned for disposal to determine whether such materials would be suitable for re-use onsite for changes in production. One example of this is the intended re-use of over 1,000 metal pallets for construction of modified six drum overpack (SDOP) containers.

#### 5.1.1 Performance Status

As reported in the Pollution Prevention Tracking and Reporting System (PPTRS), the INL Site diverted 33.1% (527 Metric Tons [MT]) of its non-hazardous solid waste in FY 2012. INL diverted 33% (464.1 MT) of municipal solid waste from the landfill in FY 2012. ICP diverted 29% (41.4 MT), and AMWTP diverted 29% (21.6 MT) of municipal solid waste from the landfill in FY 2012.

INL implemented an interactive drag and drop recycling quiz that was incorporated into the all employee Environment, Safety, and Health (ES&H) refresher training and was placed on the Recycling Program's internal website. A recycle champion award was awarded quarterly to nominated employees for their enthusiasm and participation in the recycling program. INL Dining Services began recycling the used cooking oil through a vendor in FY 2012.

Midway through FY 2012, an interactive display was placed in the new "Dynamic Learning Center." The display is intended to provide a "hands-on" experience to all new employees with a follow-up assessment of material learned. This center is also open to all employees by appointment. INL attempted to revisit the cafeteria waste composting pilot during the summer of FY 2012, since efforts conducted in FY 2011 did not produce viable compost. Weather conditions, distance between facilities, and lack of volume may prohibit small-scale composting to be conducted onsite. Further evaluation and funding availability will be necessary before a composting program could be implemented.

#### 5.1.2 Planned Actions

The INL Site will continue to educate and encourage employees to participate in the recycling and paper shredding programs in town and at the industrial campuses.

The INL Site will continue to evaluate potential outlets and the expansion of recyclable waste streams, such as mulching mowers, toner cartridges, fluorescent light tubes, batteries, and food wastes, to increase further the amount of wastes diverted from the landfill.

The INL Site will continue to reduce printing paper used through a campaign for users to set printers and copiers to duplex printing. Centrally managed printing will be evaluated.

The INL Site anticipates meeting this goal if funding is allocated to optimize the current waste diversion systems, modify contracts, and markets are available to divert waste streams.

#### 5.2 Construction and Demolition Waste Diversion

Divert at least 50% of construction and demolition materials and debris, by FY 2015.

INL has incremental goals for construction and demolition waste, increasing 10% per year from 2011 through 2015.

The diversion of construction and demolition debris during D&D activities for ICP is often problematic due to the potential for radioactive contamination. Diversion of D&D waste is often quite costly and the wastes are usually disposed of onsite.

#### 5.2.1 Performance Status

The INL Site diverted 29.6% of its construction and demolition (C&D) in FY 2012 (3,971 MT).

Construction waste and landfill acceptance data is analyzed quarterly to track performance against the goals. INL diverted 3% (67 MT) of C&D waste during FY 2012. This included C&D soil reused as landfill cover and asphalt regeneration. ICP diverted 6% (165 MT) of C&D waste in FY 2012. AMWTP diverted 44% (3,738 MT) of C&D waste in FY 2012, the majority of which was soil reuse.

#### 5.2.2 Planned Actions

INL intends to perform the following actions to enhance the C&D waste diversion process:

- Incorporate metals recycling into D&D tasks when allowed under the current recycling moratorium
- Continue analyzing the conditional waste stream to develop better segregation and reuse strategies
- Engage construction subcontractors to solicit best practice ideas relative to the INL logistics and market potential.

#### 6. SUSTAINABLE ACQUISITION

## 6.1 Sustainable Acquisition

Procurements meet sustainability requirements by including necessary sustainable provisions and acquisition clauses (95% each year).

DOE's SSPP commits to the following sustainable acquisition goals:

- Ensuring 95% of new contract actions, including task and delivery orders under new contracts and
  existing contracts, require the supply or use of products and services that are energy efficient
  (ENERGY STAR or FEMP-designated), water efficient (WaterSense), biobased, environmentally
  preferable (including Electronic Product Environmental Assessment Tool [EPEAT]-registered
  products), non-ozone depleting, contain recycled content, or are non-toxic or less-toxic alternatives.
- Updating departmental sustainable acquisition plans (previously known as green purchasing plans or environmentally preferable purchasing plans), policies, and programs to ensure that all federally mandated designated products and services are included in all relevant acquisitions.

#### 6.1.1 Performance Status

The INL Site did not meet the 95% sustainable provisions goal. ICP was not contractually obligated to track this number in FY 2012; however, ICP is now required to implement, track, and report this data in FY 2013. INL reports indicate 71% of the contracts in FY 2012 contained applicable clauses. This does not meet the goal, but changes to contract acquisition systems are time intensive and costly with little benefit to contracts that are service based. However, INL made improvements in incorporating requirements through effective implementation of procedures, clauses, policies, and enhanced work processes that increase the visibility, availability, and use of sustainable products.

- INL continued to make progress incorporating additional and revised sustainable acquisition language into contracts
- INL will continue to use commodity codes related to sustainable acquisition products to reduce the number of purchases greatly that require further review in an effort to enhance automated tracking and reporting within the current system.
- Preference program: INL's automatic document generation system was used to further incorporate in applicable contracts additional and revised sustainable acquisition language. For example, INL requires its supplier of standard desktop computers to provide items designated as EPEAT Silver or better.

- Estimation, Certification, and Verification: INL requires suppliers (e.g., construction services, office
  products, paper products, janitorial products) to deliver spend reports listing the designated versus
  preferred purchases. In addition, INL has developed standard reports that provide the summary data
  necessary for reporting spend for recycled content products and janitorial products.
- Annual Review and Monitoring: INL conducts an annual review and assessment of a specific aspect of the sustainable acquisition program.
- Sustainable acquisition requirements prior to FY 2011 were incorporated in DOE-ID major site contracts.

AMWTP has begun integrating sustainable acquisition clauses, new to the current contract, into a Sustainable Acquisitions Program, which will be implemented through procedures and roll downs into applicable subcontracts.

#### 6.1.2 Planned Actions

In recent years, there continued to be many changes and additions in sustainable acquisition requirements. INL plans to perform the following actions to improve its sustainable acquisition program:

- Develop appropriate mechanisms to augment the existing reporting requirements and track compliance with this goal
- Enhance the current ordering system to increase sustainable acquisition visibility to the laboratory community
- Ensure personnel resources are adequate and aligned in accordance with the proper organizational roles and responsibilities
- Conduct a campaign to increase the education and awareness of sustainable acquisitions and their effect on certain INL performance requirements
- Benchmark processes with other laboratories to leverage lessons learned and to discover potential improvements to INL's process.

# 7. DATA CENTERS AND ELECTRONICS STEWARDSHIP 7.1 Data Center Metering

All data centers are metered to measure a monthly Power Utilization Effectiveness (PUE) (100% by FY 2015).

The INL Site has four data centers. The first is INL's IORC, which is the primary location for the business enterprise servers and data repository. This data center hosts business systems, e-mail, project applications, and the primary business infrastructure systems for INL. The second data center is in EROB and is the location for the High Performance Computing (HPC) servers and storage.

ICP has two small data centers, one in Idaho Falls at IORC and the other at the desert site.

#### 7.1.1 Performance Status

The HPC data center in EROB was metered when constructed in FY 2007. In FY 2011, these meters were connected to INL's i-Vue building control system in order to visually display real-time power consumption and automatically calculate PUE. Additionally, the IORC data center is now metered separately and uses the i-Vue system to trend and track data.

#### 7.1.2 Planned Actions

Both data centers are metered separately from the remainder of their respective facilities. INL will continue to monitor, trend, and track data from each meter to ensure accuracy and validate PUE.

#### 7.2 Data Centers PUE Measurement

Maximum annual weighted average Power Utilization Effectiveness (PUE) of 1.4 by FY 2015.

#### 7.2.1 Performance Status

The IORC data center PUE calculates at an average of 2.03.

The EROB data center PUE has an average calculation of 1.34.

The ICP data centers were added in FY 2012 based on the updated data center definition. Plans are being developed to track, trend, and report data center PUE in the future.

Several operational adjustments were made in FY 2012 to improve the overall efficiency of the HPC data center.

- Prior to FY 2012, the Computer Room Air Conditioning (CRAC) unit fans were configured to
  operate at a variable speed that produced an inconsistency in airflow throughout the data center.
  Sections of the data center, depending on the size and usage of computer equipment, were much
  warmer than other areas. To provide better air flow and achieve a more uniform room temperature,
  the CRACs were set to a constant fan speed, which has helped produced a more uniform temperature.
- The operating room temperature was increased 7°F, from 68°F to 75°F.
- Intelligence was programmed into CRAC units and chillers to allow the chilled water supply temperature to be adjusted dependent upon the heat generated by the computer systems (i.e., as the load increases on the computer systems they generate more heat, requiring more cooling and vice versa). The CRAC units now sense that need and open their valves wider, which tells the chillers that more cooling is required and they decrease the temperature of the water supply. The chilled water supply had been hard set to 43°F; with this change, the average required temperature has increased 3°F to 5°F, which decreases the power consumption of the chillers.
- Two additional modifications were made that will improve the overall performance of the chiller plant, though not necessarily decrease PUE. The chillers and cooling towers, two of each, had been previously operating in solely a redundant mode (i.e., the second one would only be used in event of a failure of the first). The plant has been reprogrammed to operate using both chillers and both cooling towers as the load requires, while maintaining the lowest possible power consumption to meet the cooling demands.

In addition, to achieve greater operational efficiency, Information Management (IM) has embraced numerous emerging technologies within the two INL data centers by the following industry standard practices:

- Virtualizing and consolidating servers. Currently, more than half of INL servers are running in a virtual environment.
- Investing in new high-efficient server and uninterruptable power supply (UPS) hardware and replacing the legacy systems.
- Implementing facility best practices to reduce energy use.
  - Redesigning data centers and establishing hot and cold aisles to decrease air conditioner usage.
  - Removing old cabling under the floor to improve airflow.
- Investigating using newer network equipment that will utilize higher bandwidth with less equipment and port needs (Cisco Nexus).
- Purchasing Energy Star rated equipment where applicable.

#### 7.2.2 Planned Actions

Virtual Machine (VM) Server Farms. INL IM will promote the use of virtual servers (one physical server computer which may use several virtual instances of server computers) wherever possible in place of single-purpose servers.

**VM Desktops.** IM will promote the use of virtual desktops on one physical desktop computer for users who need to use several different operating systems.

**Desktop Refresh Initiative (DRI).** When the end of the year overall INL budget allows, IM will also facilitate the desktop refresher initiative that purchases newer, more efficient computers to replace older wasteful desktop computers and laptops.

As part of ongoing activities, IM will continue to upgrade and consolidate servers. Additional planned activities include popular data center practices such as increasing the data center room temperature by approximately 10°F. This by itself should provide further savings without additional risk. The data center control system is a "Carrier" system with a large number of monitoring and control points. This system will be further enhanced to provide better day-to-day monitoring, trending, and reporting. Other options are being considered such as powering down unused computer nodes to save additional power.

# 7.3 Electronic Stewardship

Electronic Stewardship – 100% of eligible PCs, laptops, and monitors with power management actively implemented and in use by FY 2012.

#### 7.3.1 Performance Status

The INL Site has been a partner in the Federal Electronics Challenge (FEC) since FY 2007. INL's participation in the FEC is supported by representatives from procurement, information management, property management, and environmental support services. Through continuous improvement, INL has emerged as a leader in electronics stewardship as evidenced by winning the FEC Bronze award in FY 2007, FY 2008, and FY 2011, and the FEC Silver award in FY 2009, FY 2010, and FY 2012. More specifically:

- INL currently has both a policy and procedure that covers the responsibility and directions for implementing and maintaining power management on PCs and monitors, and shutting down PCs (and peripherals) when not in use. The lab-wide procedure covers 100% of IM managed systems and excludes sensitive and mission-critical equipment. It also calls for owners of self-managed systems to implement the "company-standard" power management settings.
- IM continues to use a centrally managed configuration tool (LANDesk) to set and maintain power
  management settings on all Information Technology (IT)-managed and jointly managed computers.
  Administrators of self-managed computers (computers that are not manageable with LANDesk) are
  given instruction on how to set the power management settings on their computers. Exemptions from
  these power management settings are tracked in IM's Remedy database and are approved after valid
  business justifications for exemptions are provided.
- All network printers were set to duplex default in FY 2011. In FY 2012, the maintenance contract for
  copiers was modified to include setting all copiers to duplex default. All networked printers are
  required to support duplex printing as part of INL's printer standards, and efforts were started in
  FY 2012 to start using managed print services.
- INL promotes the standard for new electronic equipment and hardware to be a minimum of Energy Star 5.0 Category B rating and wherever possible, Category A Energy Rating. Dell Energy Smart is enabled from the manufacturer. Dell eSMART settings are used wherever possible.
- In FY 2012, 93.7% of desktops were FEMP Low Power Standby Compliant.

- In FY 2012, 98.6% of office-based desktops, notebooks, workstation desktops, and workstation notebooks and 97.7% of office-based computer displays were EPEAT registered. The INL standard for procurement of desktop computers, workstations, and laptops is to meet or exceed EPEAT Silver and wherever possible, EPEAT Gold standards.
- INL property services reuses computers and other electronics through disposal via reutilization, donations, transfers, and sales. These methods meet the GSA definition for recycling electronic property, resulting in over 99% reuse during FY 2012.

ICP also partnered in the FEC and was awarded the FEC Bronze award in FY 2011. Several energy saving activities are in place. Power management settings are available on personal computer systems. Network copiers were set to duplex default in FY 2012.

It is AMWTP's policy to procure only Energy Star compliant computer monitors with Energy Star power management features enabled as part of the standard load. The AMWTP IT Infrastructure Group has an established policy stating that all eligible computers and monitors must have Energy Star features that allow AMWTP to comply with the DOE's mission while ensuring effective energy conservation. The Group has implemented configurations and mechanisms on eligible systems to execute energy conservation measures automatically. Certain production and plant operations systems were excluded from this policy (i.e., control room systems and camera monitors, as those systems are safety and operations related and must remain in the "on" position). AMWTP employees are prevented from making changes to these settings by cyber security policies that are in place on all AMWTP systems.

#### 7.3.2 Planned Actions

INL Site planned actions for FY 2013 include:

- Continue to focus efforts that are cost effective and least disruptive to performers and will continue to work with IM and procurement to improve electronic stewardship.
- ICP will set network printers to duplex default in FY 2013. Desktop configuration hardware is in compliance with Energy Star and DOE standby power requirements.
- INL will achieve the FEC Gold award level for FY 2013 activities.

#### 8. SITE INNOVATIONS

INL is a science-based applied engineering national laboratory whose mission is to "ensure the nation's energy security with safe, competitive, and sustainable energy systems and unique national and homeland security capabilities." INL pursues this mission by conducting research, development, and demonstration activities to help speed the deployment of clean energy technologies, improve the management of energy-related materials, and reduce the environmental consequences of energy development.

INL is one of DOE's three recognized "energy" laboratories, and is the lead laboratory for nuclear energy research and development. In addition to the nuclear mission, INL also conducts research on advanced energy system component integration and system design and analyses comprising the following elements: (1) process modeling and analysis, (2) feedstock production and processing, (3) energy integration and heat transfer, (4) energy storage and product synthesis, (5) byproduct management, (6) process and system monitoring, control, and maintenance. INL's R&D program integrates engineering models with testing, instruments, monitoring, and control schemes to support optimal energy systems design, energy resource optimization, total carbon/water management, and hybrid energy systems. INL has recognized applied science and engineering leadership in the following clean energy specialty areas:

- Development and demonstration of biofuels feedstock technology
- Testing and demonstration of advanced battery technology

- Protection and testing of critical infrastructure
- Through the Center for Advanced Energy Studies (CAES), evaluation of energy efficiency technology to determine best practices for energy efficiency deployment
- Design and testing of hybrid energy systems for increased utilization of renewable energy and production of low carbon synthetic fuels
- Geothermal resource characterization, systems engineering, and energy recovery
- Transportation and safe management of nuclear materials
- Water resource sustainability and climate change adaptation.

The INL Site is deploying energy sustainability technologies that build on advances made by these energy research programs. INL is pursuing site innovation in three major areas: vehicles, building energy usage, and environmental sustainability.

#### 8.1 Vehicles

INL is supporting efficient, low carbon vehicle site innovations in three ways. For heavy vehicles such as buses and heavy trucks, INL is purchasing alternative fuel vehicles that have higher fuel efficiency than prior units and can operate on B20. Deployment of alternative fuel vehicles is consistent with developing a market for biofuels, and opens up opportunities to use the INL Bioenergy Program's process demonstration unit (PDU) and the hybrid energy systems facility to integrate renewable electricity generation and regional biomass production to increase simultaneously utilization of alternative low-carbon fuels while increasing utilization of renewable energy. INL is also purchasing light-duty vehicles that have higher fuel economy, can use alternative fuels, and operate on electricity. This innovation is synergistic with INL's battery testing program, and has the capacity to expand INL's usage of renewable energy. Utilization of electric vehicles also has potential synergy with INL's critical infrastructure protection facility; as such, a facility could be teamed with hybrid electric vehicles to investigate how large-scale utilization of electric vehicles could impact the security of urban electric systems and/or enhance utilization of renewable electricity.

# 8.2 Building Energy Usage

INL is building upon our programs in energy efficiency to lead the region in the deployment of sustainable buildings that meet the U.S. Green Building Council's LEED<sup>TM</sup> certification. Of INL's existing buildings, the CAES has achieved a LEED<sup>TM</sup> Gold certification. Two new buildings that are currently under construction, the ESL and the RESL will also be LEED<sup>TM</sup> certified, with the RESL building to be LEED<sup>TM</sup> Gold certified. INL is also deploying solar generation where practicable, and is investigating the potential to utilize geothermal resources to improve energy sustainability. Ground-source geothermal heat pumps are currently being investigated as an option for providing renewable heating and cooling services. INL is also developing plans to operate an Enhanced Geothermal Systems (EGS) test and demonstration facility at the INL Site, which is located in one of the United States' most promising areas for geothermal resource development. If realized, the EGS test facility could also support site innovation for producing renewable energy to support site operations.

# 8.3 Environmental Sustainability

INL is also building upon laboratory nuclear and environmental research programs to discover new ways to utilize site operations to support environmental sustainability goals. As the nation's lead nuclear laboratory, INL produces small amounts of radiologic waste material during our research operations. Most of this radiologic waste is produced at the ATR Complex and NRF. INL is in the process of designing and constructing a new radiologic waste facility to support these operations. This work is being funded out of the INL site operations budget, and has provided innovative new solutions to the environmental challenges of radiologic waste management. In this case, site operations are helping to advance an essential aspect of INL's R&D mission to advance civilian nuclear power as a clean energy alternative.

INL is also finding synergies between site operations and INL's R&D mission in the area of climate change adaptation and the future availability of water. INL's Mountain West Water Institute (MWWI) hosts a regional forum on how to address regional water sustainability issues, including water security, energy impacts on water resources, and the future availability of water. Through these forums, the MWWI helps regional stakeholders to learn about the water challenges and share ideas and case studies on how to resolve these issues. INL site operations are integral to this, as INL hosts one of the largest areas of controlled-access, minimally disturbed land in the western U.S.. Researchers at the United States Geological Survey and regional universities use INL property as a test bed to improve INL understanding of the relationships between climate, water, land management, and fire risk; and are also engaged in the MWWI initiative. This synergy provides a strong example of how INL site operations and INL research operations are working together to help regional stakeholders and agencies meet sustainability goals.

#### BUDGET/FUNDING

# 9.1 Energy Savings Performance Contracts (ESPC) Projects

INL has three active ESPC projects, the first at the IRC Complex was completed in FY 2002, the second project at the MFC Complex was completed in FY 2010, and a third project is being developed for the CFA and ATR Complex areas.

- ESPC Project 1 included lighting and primary transformer upgrades at the IRC Complex for an installed cost of \$779K, and is in Year 11 of a 19-year contract term.
- ESPC Project 2 included boiler and compressor replacements, lighting and HVAC upgrades, and solar wall installations at the MFC Complex for an installed cost of \$33M and is in Year 2 of a 16year contract term.
- ESPC Project 3 is being developed primarily for the CFA and ATR Complex areas and will include lighting and HVAC upgrades, control systems upgrades, boiler system replacements, and a potential solar wall installation. This project is expected to cost between \$8M and \$10M and to have a 22-year contract term. The project is expected to begin construction in FY 2013.

Monthly tracking of project milestones is provided to the DOE Sustainability Performance Office (SPO) for these three projects as required by the president's \$2B performance contracting initiative.

# 9.2 Sustainability related investments as required by Circular A-11

INL has identified 31 internal invest opportunities as reported in the Office of Management and Budget Circular A-11 – Section 25 budget table. The Investment Type breakdown is as follows: 11 projects are Embedded/Leveraged Investments; 14 are Incremental Investments; and six are Alternative Investments. The bulk of the investments are intended to support energy management, water management, and design and construction, but capital equipment and renewable energy are also included. Annually, INL identifies projects and funding necessary to meet the requirements of the DOE Orders.

The 31 opportunities include control system upgrades, water fixture replacements, efficient motors, electric and water meter installation, outdated mechanical equipment replacement, renewable energy installation, and applying R&D projects as a proof-of-concept. This list is refined annually based on emerging data analysis and program direction. INL consults with energy, transportation, and environmental coordinators and the SPO as project proposals are revised, ensuring up-to-date direction is incorporated into the decision making process.

# 9.3 Integration of Long-Term Sustainability Goals into the Budget Process

As a government entity, the INL Site is limited in funding acquisition pathways. There is no standard formula for funding sustainability initiatives. However, realistic funding strategies reflect four main sources:

- ESPC and UESCs
- Utility incentive programs
- Direct and indirect funding and reinvesting cost savings from sustainable actions
- Special funding requests (third party, DOE base funding, line item).

A practical hybrid approach is achievable where all stakeholders participate with funding. Each of the four sources has merits and drawbacks. For example, ESPC projects are comprehensive but time consuming to develop. Typically, an ESPC project can take over 12 months for project development followed by 18 months or more for design and construction.

The base Sustainable INL Program is funded with indirect dollars. The program is able to use utility incentives to further fund facility upgrades. Strategic investment dollars are prioritized at a senior leadership level and balanced against Laboratory needs.

The challenge of implementing sustainability is to minimize the impact to operations while increasing the health and viability of the Laboratory. INL is integrating sustainability performance improvements in the areas that matter most to its stakeholders, including minimizing the environmental footprint, taking a progressive approach to mitigating climate change, and championing energy conservation.

# 9.4 Reinvestment Program

The INL Site has three options available for reinvestment of energy and water savings:

- Utility Incentives. Project rebate incentives are available from Idaho Power, Idaho Falls Power, and the Bonneville Power Administration. These incentive programs are routinely used to obtain incentive payments for both internally funding projects and alternatively funded projects. The incentive payments are used to fund additional project opportunities or to buy down the cost of ESPC projects, allowing for additional ESPC ECM implementation.
- ESPC Excess Savings Reinvestment. ESPC projects typically guarantee energy savings less than the
  expected calculated savings. These excess savings should be identified for reinvestment into
  additional energy and water saving projects.
- Energy Savings from Internally Funded Projects. All internally funded projects intended to reduce energy consumption provide reinvestment opportunities for realized savings. In FY 2013, savings from the FY 2012 SIF projects will be tracked and a savings reinvestment plan piloted in FY 2014.

As meters are installed on the buildings expected to meet the Guiding Principles and on buildings upgraded by ESPC projects, the energy consumption data will be tracked and realized savings will be identified for reinvestment opportunities. This data will be used to develop a draft formal reinvestment program for INL in FY 2013.

### 10. CLIMATE CHANGE ADAPTATION

# 10.1 Climate Change Adaptation

The Intergovernmental Panel on Climate Change defines climate adaptation as, "adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities." The White House Council on Environmental Quality's Interagency Climate Change Adaptation Task Force has established a framework for conducting climate change adaptation planning, and DOE Secretary Chu adopted this framework in his Climate Adaptation Policy Statement of June 2, 2011. According to this document, the federal government's core role should be to:

- Promote and implement best practices for adaptation
- Build greater public awareness and understanding of the importance of adaptation
- Maintain dialogue and partnerships with stakeholders and decision makers
- Enhance services that enable informed decisions based on the best available science
- Work with the international community to improve knowledge sharing.

This report also emphasizes that the federal government must exercise a leadership role to address climate impacts on federal infrastructure interests and on natural, cultural, and historic resources that it has statutory responsibilities to protect; and provides eight Guiding Principles for climate adaptation. These are (i) adopt integrated approaches, (ii) prioritize the most vulnerable, (iii) use the best available science, (iv) build strong partnerships, (v) apply risk management methods and tools, (vi) apply ecosystem based approaches, (viii) maximize mutual benefits, and (viii) continuously evaluate performance.

Secretary Chu's Policy Statement of June 2, 2011 also established a DOE Climate Change Adaptation Planning Working Group, who would draft a climate adaptation plan and integrate it into the SSPP. Secretary Chu's policy statement also notes that climate change adaptation efforts have the potential to provide synergy with DOE's clean energy mission, and states that DOE will explore these opportunities while planning for climate adaptation. The 2012 SSPP established three priority actions for Climate Change Adaptation for FY 2012. In brief, these actions would:

- Outline a strategy to develop realistic climate scenarios, using the best available science
- Gain a better understanding of DOE programmatic implications and opportunities
- Use DOE's existing emergency management, hazard assessment, risk management, and frameworks to evaluate climate change impacts at DOE sites.

The results from this work was summarized in DOE's high-level analysis of vulnerability to climate change, and incorporated into the guidance the FY 2013 Site Sustainability Plans. The following section describes how INL will meet these objectives.

# 10.2 Objectives

INL Site sustainability accomplishments will help DOE meet the following objectives for climate change adaptation, as listed in the FY 2013 SSP Guidance document:

- Goal 1: Improve Understanding of Climate Change Effects and Impacts
  - Objective 1.1: Work with other agencies to improve INL's understanding of climate change
  - Objective 1.2: Work with other federal agencies and local jurisdictions (as appropriate) to develop regional partnerships for climate change information sharing and collaboration

- Goal 2: Improve Understanding of Climate Change Vulnerabilities and Risk
  - Objective 2.2: Conduct detailed risk or vulnerability assessments, as appropriate, for specific DOE programs or facilities
- Goal 4: Improve the Climate Resiliency of all DOE Sites
  - Objective 4.1: Update all appropriate DOE site plans to address climate change resiliency
  - Objective 4.2: Identify or establish and participate in regional climate change adaptation partnerships, as appropriate, for all DOE facilities.

Note: Objectives 2.1, 3.1, and 3.2 in the DOE Climate Change Adaptation Plan were excluded from this section as they are not applicable to individual DOE sites.

# 10.3 Current Understanding of Potential Climate Change Effects and Impacts

The United States Global Change Research Program (USGCRP) has assessed climate impacts within nine major U.S. regions. INL is located in the high desert of southeastern Idaho, which is situated within USCGRP's Northwest Region (Figure 1). However, INL's local geography and ecology is more analogous to the Great Basin landscape (Figure 2, light red) than the wetter landscape of the Great Northern landscape that largely defines the USCGRP's Northwest region (Figure 2,

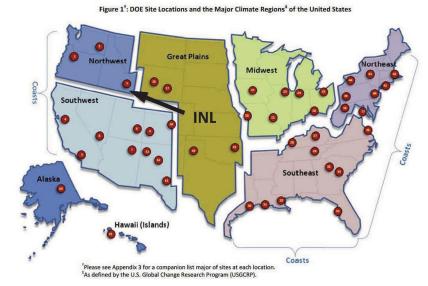


Figure 1. Major climate regions of the United States.

dark green). This combination of physical geography and landscape form suggest that INL's site combines aspects of both the Northwest and Southwest regions, as defined by USGCRP. The Jim Bridger coal plant in Wyoming provides much of INL's electricity, and thus climactic trends in the Great Plains climate region could impact INL's electricity services. INL's location at the confluence of three major climate regions requires that impacts on each region be considered.

## 10.3.1 Climate Impacts for the Northwest Region

The USGCRP reports that annual average temperature over the Northwest region rose about 1.5°F over the past century, with some areas experiencing increases up to 4°F. The region's average temperature is projected to rise another 3 to 10°F between now and 2100 (USGCRP, 2009). Rising temperature will impact the region in a number of important ways. Key impacts will include:

- Increased summer temperatures, leading to greater heat stress and higher demand for energy to cool buildings.
- Declining spring snowpack and more prevalent spring rains,

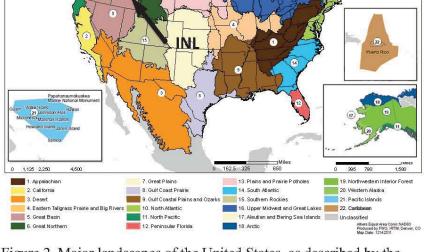


Figure 2. Major landscapes of the United States, as described by the U.S. Geologic Survey (USGS).

- leading to higher spring run-off and lower summer stream flows and increasing strain on water resources.
- Higher summer water temperature, combined with lower stream flows, would reduce the efficiency
  and availability of cooling water for power production. This could reduce electricity availability
  during a period of increased demand for summer cooling.
- Increased incidence and severity of wildfire, impacting human health and safety, restricting site operations, and threatening electricity transmission infrastructure.
- Increased incidence of pestilence and disease, impacting human health and safety, and potentially altering ecosystem function.

#### 10.3.2 Climate Impacts for the Southwest Region Applicable to INL

The USGCRP reports that annual average temperature over the Southwest region rose about 1.5°F over the past century, roughly comparable to the Northwest region. Projections of future temperature increase are also roughly comparable with those of the Northwest region. The Southwest region is anticipated to experience severe water shortages, due to large reductions in spring precipitation. INL is located in water basins fed by the Northwest water system, but is immediately adjacent to the Southwest region and has a similar arid landscape. Ecosystem, fire, and landscape impacts may be more akin to the Southwest region than the Northwest.

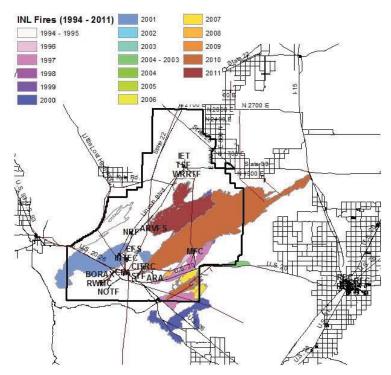


Figure 3. History of wildfire at INL since 1994.

USGCRP predicts that a combination of increasing temperature, drought, invasive species, and more frequent and severe wildfires will accelerate the transformation of the landscape in the Southwest region. Such change will threaten biological diversity, and could lead to large-scale transformation of the animal and plant species residing on INL property. This would alter the environmental basis for INL planning and operations, and may introduce new environmental threats. For example, USGS has projected that climate change in the Southwest would reduce perennial vegetation cover and result in increased dust storm activity in the future (Munson et. al., PNAS 2011). If the landscape of INL transforms toward one that is more reflective of north/central Nevada and Utah, then dust storms could become more frequent and more severe. With regard to wildfires, historical data show that wildfires regularly threaten INL infrastructure and that some of INL's largest fires have occurred in recent years (Figure 3). Recent studies conducted on the INL Site have helped develop new approaches for quantifying the extent of wildfire, dust transport, and landscape change; and have identified potential feedback cycles between these processes. There may be an opportunity to build upon the work to establish an interagency collaboration to help develop a better understanding of the feedbacks between climate change, wildfire, and landscape transformation.

#### 10.3.3 Climate Impacts for the Great Plains Region Applicable to INL

USGCRP reports that, over the past century, temperature change in the Great Plains region has been roughly equivalent to that of the Northwest and Southwest regions. Projections of future temperature increase are also roughly comparable with those of the Northwest region. The region is expected to experience increases in the frequency and severity of drought, exacerbating strain on the region's water resources. Lack of water resources could reduce the generating capacity of coal-fired power plants in Wyoming during summer months, thereby reducing the amount of electricity available for INL use. Climate change is also expected to alter the landscape and ecosystem structure in key habitats, which

could lead to increased restrictions on air emissions, water use, and land use. These factors, combined with ongoing shifts in the region's population, could place greater strain on the region's energy grid and further reduce the amount of electricity available for export.

# 10.4 Actions to Fulfill DOE Climate Adaptation Objectives

INL controls access to a large swath of land that is located at the intersection of three USGCRP climate regions, and provides ready access to both pristine and developed land that is fed by a combination of managed water systems (Snake River) and unmanaged water systems (Salmon River). INL is also the only U.S. National Laboratory located in the Great Basin landscape, which is an environmentally sensitive area that has extensive renewable generation capacity. Thus, INL is well suited to host climate change adaptation research and demonstration activities that (a) help INL gain a better understanding of how climate change will impact human and environmental systems in the intermountain west, (b) test approaches to mitigating future impacts, and (c) provide leadership that will help the region and nation respond to this challenge. A strategy for achieving these goals is outlined in the following sections.

#### 10.4.1 Goal 1: Improving our Understanding of Climate Impacts in INL's Region

INL is currently partnering in a number of regional efforts to improve our understanding of climate impacts on the region. Notable examples include:

- Providing a field study site for understanding relationships between fire, dust transport, and ecosystem change in the Great Basin landscape.
- Hosting the Mountain West Water Institute, which is a federal/state collaboration that provides the science, predictive tools, and technologies needed to help the region's water stewards and users rapidly and effectively assess, monitor, and proactively adapt to changes in resource conditions.
- Hosting a mirror site for the Northwest Knowledge Network (NKN), which is a data management
  system that provides storage, retrieval, and protection services across the life cycle of data. NKN
  serves researchers, educators, and the public specializing in cross-disciplinary data and its application
  to issues of note in the state and northwest region. NKN currently has 20 federal, state, and university
  partners, and provides data services for regional initiatives that include the Northwest Climate
  Science Center and the Fire Research and Management Exchange Systems (FRAMES).
- Actively collaborating with university peers supported by the Nation Science Foundation (NSF)funded Idaho Experimental Program to Stimulate Competitive Research (EPSCoR) project, which is
  developing regional R&D capacity to improve our understanding of how climate change will impact
  water resources.

INL will fulfill the objectives of Goal 1 (i.e., Improve our Understanding of Climate Change) by expanding current involvement with these regional initiatives. INL actions to advance Goal 1 will focus on two outcomes:

- Develop and implement R&D collaborations with regional universities and governmental agencies to understand how climate change impacts on regional fire risk, ecosystem function, and water resources will impact the delivery of energy and water services to both INL facilities and the regional community at-large.
- 2. Develop a collaborative R&D plan for how INL could function as a field research site to improve the laboratory's understanding of (a) how climate change will impact the ability of the Great Basin landscape to sustainably support regional economic and energy development, and (b) develop and test new monitoring and resource management technologies and strategies that could support climate change adaptive management.

The first step towards achieving these objectives would be for INL to host a regional scientific forum to define research needs and develop a research plan for how to meet these goals. This forum could be conducted as either a regional meeting at INL, hosted by MWWI; or by INL researchers hosting a special forum at a regional climate science meeting. The product of this effort would be a Strategic Research Plan that would be delivered to the leadership of all participating institutions and agencies (including DOE-SPO), and made available to the public. INL's ability to pursue this objective in FY 2013 is dependent on identifying a mechanism for funding the required travel and staff costs.

#### 10.4.2 Goal 2: Assessing Climate Change Vulnerability and Risk at INL

Assessing climate vulnerability requires a strong understanding of the climate risks, their relative severity, and what time scale on which they are likely to operate. Thus, climate change vulnerability assessments will be updated regularly as the science advances and climate change impacts become more noticeable. Detailed INL-site vulnerability assessments will be made every 4 years, in the year following the issuance of the quadrennial USGCRP National Climate Assessment. In the interim years, the site vulnerability assessment will be updated to reflect new knowledge; and integrated into the INL SSP.

In FY 2013, INL will support Objective 2.2 by using the 2009 National Climate Assessment as the basis for conducting our first Climate Change Vulnerability Assessment. To achieve this outcome, INL will conduct two activities as funding is available:

- Using the 2009 National Climate Assessment and the DOE High Level Analysis of Vulnerability to Climate Change as a basis, INL will develop a report that summarizes anticipated climate impacts to the Site, workforce, and community in the coming decade. This report will be written and reviewed in collaboration with regional experts.
- 2. Once this report is prepared, INL will present its results to site operations officials and conduct a vulnerability assessment. Options for mitigating vulnerabilities will also be discussed and assessed. The results from this risk and vulnerability assessment will then be published in an INL technical report, which will also be reviewed by regional experts.

These objectives can be met with current knowledge, gained through literature review and consultations with subject matter experts at regional universities and partner agencies. This work can proceed independently of efforts to support Goal 1. However, work advancing towards this goal will proceed synergistically with progress towards Goal 1 to the greatest extent practicable.

#### 10.4.3 Goal 4: Improving Climate Resiliency at INL

Efforts to advance Goal 4 are limited by the lack of a site-specific climate vulnerability assessment. Site plans cannot be updated until a vulnerability assessment has been completed. Consequently, progress toward Objective 4.1 will proceed concomitantly with progress toward Objective 2.2. Once a vulnerability assessment has been completed and an action plan established, INL will track progress towards climate resiliency goals. INL will support progress toward Objective 4.2 through its partnering efforts conducted in support of Goal 1.

For the purposes of the INL SSP, the brief review of the 2009 USGCRP National Climate Assessment reveals five key areas of potential vulnerability. These are:

- Increased potential for wildfire and associated risk to worker safety, INL operations, and INL
  infrastructure
- 2. Increased threats to worker safety through heat stress, dehydration, and exposure to disease and pests
- 3. Increased uncertainty in infrastructure planning and permitting due to the potential for long-term landscape change
- 4. Increased uncertainty regarding water availability to support INL Site operations

5. Increased risk of power disruptions during summer months, when water shortages could lead decreased production from the region's electricity facilities.

These potential vulnerabilities can be mitigated through existing INL safety, operations, and infrastructure planning processes. These five areas of potential vulnerability will provide the initial basis for FY 2013 efforts to (a) develop a detailed climate vulnerability assessment, and (b) enhance and/or establish regional partnerships that work to improve our understanding of climate change impacts and the viability of alternative technology and adaptive management responses.

# 10.5 Synergies with Climate Mitigation Efforts and Laboratory Mission

INL's mission is to provide science and technology solutions that help ensure the nation's energy security with safe, competitive, and sustainable energy systems and unique national and homeland security capabilities. INL achieves this mission by functioning as the pre-eminent nuclear energy laboratory with synergistic multi-program capabilities and partnerships. There are many synergies between INL's mission and the climate adaptation imperative, including:

- An improved understanding of how climate change will impact water availability, fire risk, and
  ecosystem function and how these factors could combine to impact nuclear facility design, siting, and
  operations.
- As above, but for renewable energy production facilities; with a focus on landscapes in the Great Basin and surrounding regions.
- As above, but with a focus on national and homeland security issues.
- Development and demonstration of environmental monitoring technologies that can help facilitate clean energy development by improving capabilities for real-time response of energy systems to environmental stimuli.
- Efforts to reduce the carbon footprint of INL operations and progress toward zero-carbon facilities provide opportunities to conduct demonstration projects that can show local and regional stakeholders how transitioning to clean, sustainable energy generation also improves climate resiliency.
- INL's network of regional partnerships provides a basis for educating regional stakeholders on their sustainable energy options, and developing mobile units that can travel throughout the region to demonstrate effective climate adaptation strategies.
- AMWTP has observed that with milder winters, potentially associated with the effects of climate change, AMWTP maintenance has consumed lower volumes of diesel and gasoline onsite. This reduction is credited to fuel that is normally necessary for powering heavy equipment associated with snow removal during harsh Idaho winters.
- The potential for warmer winters at INL suggests that many of the operations occurring in traditionally unconditioned spaces (the Transuranic Storage Area Retrieval Enclosure [TSA-RE] and the AMWTP Type II modules) will result in reduced consumption of fossil fuels used for more inefficient area heating. This reduction may reduce the contribution of emissions at AMWTP toward the potential for anthropogenic climate change.

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# Appendix A Glossary

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### Appendix A

### Glossary

Alternative Fuel. A vehicle or equipment fuel that is either not petroleum based, or significantly reduces the petroleum content of the fuel. Biodiesel blends such as B20 (20% biodiesel) and Ethanol blends such as E-85 (85% Ethanol) are the more common alternative fuels. Compressed natural gas (CNG) and liquefied natural gas (LNG) are also recognized alternative fuels that are not a blended fuel.

Alternative Fuel Vehicle (AFV). Vehicles specially designed to run on an alternative fuel. They can be dedicated to a single alternative fuel such as LNG, or they can be dual fuel capable of operating on both alternative such as CNG or E-85 and gasoline. Diesel engine vehicles that can simply be operated on a biodiesel blend are usually not considered AFVs.

Commissioning. A process of ensuring that all building systems are installed and perform interactively according to the design intent, the systems are efficient and cost effective and meet the owner's operational needs, the installation is adequately documented, and the operators are adequately trained.

Commissioning Authority. The individual hired by, or responsible to, the building owner and is tasked with implementing the commissioning process for a new or existing building. The Commissioning Authority is typically responsible for all aspects of the commissioning process, leads and trains the commissioning team, and witnesses or verifies all system checks or inspections throughout the process. The Commissioning Authority has final jurisdiction for the entire commissioning process.

Continuous Commissioning. Continuous commissioning involves ongoing monitoring and testing of systems as part of a regular maintenance plan to ensure optimum performance and enhanced equipment longevity. Continuous commissioning can be at a system or a building level depending upon the requirements of the stakeholders.

*Energy Efficiency*. The ability of a building to minimize the amount of energy used for employee safety, health, and comfort. Energy efficiency also applies to the processes that are performed inside the building, which are not necessarily part of the physical structure. Energy efficiency improvements should always be measured by life-cycle cost effectiveness, and not by first cost or simple payback.

ESPC. Energy Savings Performance Contracts (ESPC) are projects that are developed, engineered, performed, and funded by an outside contractor called an Energy Services Contractor (ESCo). ESPCs are paid for through the energy savings derived from the project and are intended to be a no-cost turn-key process or project. The annual payments are made to the ESCo with funds that would have been distributed to the utility. ESPCs are especially useful when capital funding is not readily available. DOE sites can take advantage of the ESPC program, which provides pre-evaluated ESCos familiar with federal processes.

HVAC. Heating, ventilating, and/or air conditioning (cooling) systems in a building. HVAC systems include all components, controls, and distribution systems needed to deliver conditioned air to the desired point of use.

*Indoor Environment.* A building's indoor environment includes many factors including the quality of the air in and supplied to the building, temperature levels, and consistency throughout the building, amount of pollutants in the workspace, lighting levels, and quality, levels of unwanted sound, and amount of day lighting.

*INL Site*. All contractors and activities at the INL Site under the control of the DOE-ID Operations Office, but excludes the Naval Reactors Facility (NRF).

LEED<sup>TM</sup> Rating System. Leadership in Energy and Environmental Design (LEED<sup>TM</sup>) is a tool for green building design to help design teams and owners determine green project goals, identify green design strategies, measure and monitor progress, and document success. The LEED<sup>TM</sup> Rating System was developed and is administered by the U.S. Green Building Council (USGBC), which is a national non-profit organization that includes representation from all aspects of the building industry. The LEED<sup>TM</sup> Rating System is a point system of five technical categories and four levels of certification: LEED<sup>TM</sup> Certified, Silver, Gold, and Platinum.

Low-Cost. Low Cost modifications or repairs may be performed during the commissioning process, but are typically implemented shortly after. Low-cost opportunities typically cost less than \$500 and can be accomplished in bundled groups.

*No-Cost.* Adjustments or modifications that can be made during the commissioning implementation phase by in-house crafts. These on-the-spot modifications are essentially no cost other than the time for the craft person to be available. No-cost adjustments should be maximized during the implementation phase.

Re-commissioning. Commissioning that is performed several years after a building, which was previously commissioned, has been in operation to ensure that the building and systems are meeting the original design requirements. Re-commissioning is typically used to identify and correct malfunctions in a building that occur as the building ages and to ensure continued indoor air quality, employee productivity, and energy efficiency. Re-commissioning can also be used to address changes in ownership, building use patterns, and operation and maintenance practices. A building's use and mission often change during the building's life and these changes necessitate the need for re-commissioning to ensure that the building is capable of efficiently meeting its new and/or evolving mission.

Retro-commissioning. Applying the commissioning process to a building that has never been commissioned. Retro-commissioning is sometimes referred to as "Existing Building Commissioning" and is used to compare the building's original design parameters and operational criteria with current design and operational requirements. Retro-commissioning determines if the building is capable of meeting its current mission needs and identifies modifications required to meet those needs. Retro-commissioning then identifies upgrades to the building that will enhance its energy efficiency, tenant comfort and productivity, and indoor air quality. Retro-commissioning as a best practice means using a whole building approach to ensure that the building is operating within well-defined criteria established by the building stakeholders.

Sustainability. The ability of a society to operate indefinitely into the future without depleting its resources. Sustainability includes concepts of green building design and construction, reuse and recycling of materials, reduced use of material and energy resources for building construction and operation, water conservation, and responsible stewardship of the environment adjacent to the building.

### **Appendix B**

**Excluded Buildings Self-Certification** 

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### DOE BUILDING EXCLUSION SELF-CERTIFICATION FORM FY 2012

**FROM:** DOE Idaho Operations Office, Idaho National Laboratory Site Lead Program Office is the Office of Nuclear Energy

TO: Sustainability Performance Office

**DATE:** November 19, 2012

SUBJECT: SELF-CERTIFICATION FORM FOR THE ENERGY INTENSITY GOAL OF EISA 2007

Each building or group of buildings excluded under the criteria for a Part G or Part H exclusion is/are metered for energy consumption and their consumption is reported annually.

If any building has been excluded under the criteria for Part H for impracticability then all practicable energy and water conservation measures with a payback of less than 10 years have been installed. A justification statement that explains why process-dedicated energy in the facility may impact the ability to meet the goal has been provided in the FIMS Report 063.

I certify that the buildings listed on the Excluded Buildings List produced by FIMS as Report 063 dated 19 November 2012, for the Idaho National Laboratory Site meet the exclusion criteria in *Guidelines Establishing Criteria for Excluding Buildings* published by FEMP on January 27, 2006.

Teresa Perkins
DOE Site Office Official - printed name
Sumpaha .
DOE Site Office Official – Signature
November 19, 2012

November 19, 2012

Date

Contact Information: Teresa Perkins, Director Environment and Sustainability Division DOE-ID

Phone: (208)526-1483 eMail: perkintl@id.doe.gov

Or: Ernest Fossum, INL Energy Manager (208)526-2513 Ernest.Fossum@inl.gov U.S. Department of Energy Facilities Information Management System (FIMS 063)

Energy Consuming Excluded Buildings and Trailers List

11/19/2012 Page 1 of

Idaho National Lab-Scoville

06001 빌

Site

Program Office

Property ID Justification Comments:	Real Property Unique ID	Property Name	Exclusion Part	Property Type	Gross SQFT Exclud	Excluded SQFT
TRA-676	92397	RTC Fitness Center	G - Metered intensive loads	Building	2,146	2,146
The ATR and its three support facilities use 6 use for these buildings is separately metered	facilities use 62% of the total rately metered.	The ATR and its three support facilities use 62% of the total Electricity consumed at the ATR Complex area. This building is one of four small incidental buildings that are metered with the four primary ATR Buildings. Energy use for these buildings is separately metered.	rrea. This building is one of four small inc	idental buildings that are mete	red with the four primary ATR Building	. Energy
TRA-640	96650	Hazardous Chem Storage Bldg	G - Metered intensive loads	Building	1,891	1,891
The ATR and its three support facilities use 6: use for these buildings is separately metered.	facilities use 62% of the total rately metered.	The ATR and its three support facilities use 62% of the total Electricity consumed at the ATR Complex area. This building is one of four small incidental buildings that are metered with the four primary ATR Buildings. Energy use for these buildings is separately metered.	irea. This building is one of four small inc	idental buildings that are mete	red with the four primary ATR Building	. Energy
TRA-674	96652	Diesel Generator Bldg	G - Metered intensive loads	Building	704	704
Advanced Test Reactor (ATR) process energ use for these buildings is separately metered	process energy use. The AT rately metered.	Advanced Test Reactor (ATR) process energy use. The ATR and its three support facilities use 62% of the total Electricity consumed at the ATR Complex area. This building is one of the four primary ATR Buildings. Energy use for these buildings is separately metered.	the total Electricity consumed at the ATR	Complex area. This building	is one of the four primary ATR Building	s. Energy
TRA-673	96141	Reactor Mockup Facility	G - Metered intensive loads	Building	1,188	1,188
The ATR and its three support facilities use 6 use for these buildings is separately metered.	facilities use 62% of the total rately metered.	The ATR and its three support facilities use 62% of the total Electricity consumed at the ATR Complex area. This building is one of four small incidental buildings that are metered with the four primary ATR Buildings. Energy use for these buildings is separately metered.	ırea. This building is one of four small inc	idental buildings that are mete	red with the four primary ATR Building	. Energy
TRA-670	96138	ATR Reactor Building	G - Metered intensive loads	Building	130,213	130,213
Advanced Test Reactor (ATR) process energ use for these buildings is separately metered _	process energy use. The AT rately metered.	Advanced Test Reactor (ATR) process energy use. The ATR and its three support facilities use 62% of the total Electricity consumed at the ATR Complex area. This building is one of the four primary ATR Buildings. Energy use for these buildings is separately metered.	the total Electricity consumed at the ATR	Complex area. This building	is one of the four primary ATR Building	s. Energy
TRA-671	96139	ATR Cooling Tower Pumphouse	G - Metered intensive loads	Building	3,568	3,568
Advanced Test Reactor (ATR) process energuse for these buildings is separately metered	process energy use. The AT rately metered.	Advanced Test Reactor (ATR) process energy use. The ATR and its three support facilities use 62% of the total Electricity consumed at the ATR Complex area. This building is one of the four primary ATR Buildings. Energy use for these buildings is separately metered.	the total Electricity consumed at the ATR	Complex area. This building	is one of the four primary ATR Building	s. Energy

This report qualifies DOE Owned, DOE Leased, and Contractor Leased buildings and trailers where the Energy Consuming Metered Process (Excluded) Facilities gsft is greater than zero.

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(FIMS 063)	

Facilities Information Management System
Energy Consuming Excluded Buildings and Trailers List

11/19/2012

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Program Office NE

Site 06001 Idaho National Lab-Scoville

Property ID Justification Comments:	Real Property Unique ID	Property Name	Exclusion Part	Property Type	Gross SQFT	Excluded SQFT
TRA-689	131170	Dynamic Learning Facility (	G - Metered intensive loads	Building	5,470	5,470
The ATR and its three support facilities use 6 use for these buildings is separately metered	facilities use 62% of the total ately metered.	The ATR and its three support facilities use 62% of the total Electricity consumed at the ATR Complex area. This building is one of four small incidental buildings that are metered with the four primary ATR Buildings. Energy use for these buildings is separately metered.	a. This building is one of four small inci	dental buildings that are meter	ed with the four primary ATR	Buildings. Energy

404 Building G - Metered intensive loads Pump House & Well #4 **TRA-672** 

Advanced Test Reactor (ATR) process energy use. The ATR and its three support facilities use 62% of the total Electricity consumed at the ATR Complex area. This building is one of the four primary ATR Buildings. Energy use for these buildings is separately metered.

This report qualifies DOE Owned, DOE Leased, and Contractor Leased buildings and trailers where the Energy Consuming Metered Process (Excluded) Facilities gsft is greater than zero.

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### **Appendix C**

**Consolidated Energy Data Report (CEDR)** 

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### **CEDR Content**

The Consolidated Energy Data Report (CEDR) consists of 23 worksheets that should be completed by each site, as applicable, and included as part each site's SSP in a MS Excel electronic format. The CEDR is due to the SPO no later than December 7th.

Work	sheet	Overview	Action
1.1	Content	Stand-alone overview of the CEDR tabs.	None.
1.2	Performance Summary	Summary table of goals performance.	None.
1.3	Factors and Drop-down Keys	Reference tab containing all factors and drop-down menus information for all tabs.	None.
2.1	Funds, Meters, Training	Collects information on energy and water spending, and metering status.	If applicable, complete cells with blue text.
3.1	Energy & Water	Collects quarterly consumption and associated cost information for facilities, non- fleet vehicles and equipment, and fully serviced leases (new, voluntary in FY 2012) for each fiscal year since FY 2003. Do not report on-site generated and purchased renewable energy or on-site generated non-renewable energy in this tab.	Enter FY 2012 consumption and cost data and review historical information for accuracy.
3.2a	Operating On-Site Renewables	Houses the list of active renewable energy systems at DOE sites to track progress towards renewable energy requirements in EPAct2005 and DOE O 436.1. Also used towards developing the site's GHG inventory.	Review pre-populated data and update as necessary.
3.2b	Purchased Renewables	Collects renewable energy purchases to track progress towards renewable energy requirements in EPAct 2005 and DOE O 436.1. Also used towards developing the site's GHG inventory.	Review pre-populated data and update with FY 2012 purchased data.
3.3	Conservation & RE Measures	Tracks planned energy and water conservation measures, in addition to future renewable energy systems. Also used to project future energy/water consumption along with performance towards goals.	Review pre-populated data and update as necessary.
3.4	Bldg Inventory Changes	Tracks demolition and new construction projects along with construction requirements for meeting HPSB, EPAct 2005 30 percent better than ASHRAE, and stormwater design. Also used to project future energy/water consumption.	Review pre-populated data and update as necessary.
4.1	Source Energy Savings Credit	Part of the Annual Energy Report to adjust site energy use accounting from projects — especially combined heat and power — that would change the accounting of site vs. source energy.	Complete worksheet, if applicable.
5.1	Data Centers	Inventory of DOE data centers along with basic energy management metrics.	Complete worksheet, if not using DOEGRIT.
6.1	Mixed Refrigerants	Collects and calculates fugitive emission data for refrigerants and fluorinated gases.	Review pre-populated data and update with FY 2012 emissions.
6.2	Fugitive F-gases	Collects and calculates fugitive emission data for fluorinated gases and other fugitive emissions.	Review pre-populated data and update with FY 2012 emissions.
6.3	Industrial Process	Collects and calculates GHG emission data for industrial process by process.	Review pre-populated data and update with FY 2012 emissions.
7.1a	On-Site Wastewater	Collects and calculates fugitive emissions data for on-site wastewater treatment.	Review pre-populated data and update with FY 2012 emissions.
7.1b	Contr. Wastewater	Collects and calculates GHG emissions resulting from contracted off-site wastewater treatment, excluding electricity.	Review pre-populated data and update with FY 2012 emissions.
8.1	Air Bus Travel	Collects and calculates emissions for prime contractor employee business air travel.	Review pre-populated data and update with FY 2012 emissions.
8.2	Ground Bus Travel	Collects and calculates emissions for prime contractor employee business ground travel.	Review pre-populated data and update with FY 2012 emissions.
8.3	Commuter Travel	Collects and calculates emissions for prime contractor employee commuting.	Review pre-populated data and update with FY 2012 emissions.
9.1a	On-Site Landfill (Optional)	Calculates emissions for on-site landfill; data should be consistent with PPTRS entry.	Optional – Based on PPTRS data entry.
9.1b	Off-Site MSW (Optional)	Calculates emissions for contracted/off-site municipal solid waste disposal; data should be consistent with PPTRS entry.	Optional – Based on PPTRS data entry.
10	Fleet Fuel (Optional)	Calculates emissions for fleet fuel consumption based on FAST data.	Optional - Download and paste FAST data.
11	Covered Facilities	List of covered facilities with anticipated evaluation dates and type/level.	Select covered facilities and complete associated data columns.

### **Performance Summary**

The table below summarized performance for several sustainability goals based on information reported in this workbook. Please note, Scope 1 & 2 GHG emissions do not include emissions from on-site and contracted landfill as these are to be reported in PPTRS.

SSPP Goal #	DOE Goal	Baseline	Current FY	Performance Status
1.1	28% Scope 1 & 2 GHG reduction by FY 2020 from a FY 2008 baseline	141,102.9	112,484.3	-20.3%
1.2	13% Scope 3 GHG reduction by FY 2020 from a FY 2008 baseline	28,853.7	26,760.9	-7.3%
2.1	30% energy intensity reduction by FY 2015 from a FY 2003 baseline (Note: Estimates without REC credit)	183,011	157,690	-13.8%
	Goal Energy (10^6 Btu)	1,023,492	856,316	3
	Goal Square Footage (x1,000)	5,593	5,430	
2.3a	Individual buildings or processes metering for 90% of electricity (by October 1, 2012)		49.0%	49.0%
2.3b	Individual buildings or processes metering for 90% of natural gas (by October 1, 2015)		100.0%	100.0%
2.3c	Individual buildings or processes metering for 90% of steam (by October 1, 2015)		0.0%	0.0%
2.3d	Individual buildings or processes metering for 90% of chilled water (by October 1, 2015)		0.0%	0.0%
2.7	7.5% of annual electricity consumption from renewable sources by FY 2013 and thereafter (5% FY 2010 – 2012)	221,512	22,000	9.9%
3.1	2% annual reduction in fleet petroleum consumption by FY 2020 relative to a FY 2005 baseline (Note: Estimates without biodiesel credit)	938,197	747,777	-20.3%
3.2	10% annual increase in fleet alternative fuel consumption by FY 2015 relative to a FY 2005 baseline	76,436	194,429	154.4%
4.1	26% water intensity reduction by FY 2020 from a FY 2007 baseline	173.9	154.0	-11.4%
4.1	Potable Water Consumption (10^6 Gal)	1,051	859	
	Total Gross Square Footage (x1,000)	6,043	5,576	
4.2	20% water consumption reduction of industrial, landscaping, and agricultural (ILA) water by FY 2020 from a FY 2010 baseline	0	0	0.0%

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### **Energy Management Data Report**

Requirement(s): See tables

Instructions If applicable, complete cells with blue text and highlight the cell. The information requested is for completing DOE's Annual Energy Report.

Source Site/Lab All data reviewed, updated, and is correct for FY 2013 CEDR Report - Ernest Fossum 11/26/12

### ENERGY EFFICIENCY IMPROVEMENTS AND FUNDING

### 1-1. E.O. 13514/OMB Circular A-11 Direct Agency Obligations

	FY	2012	Projected F	Y 2013	Projected	FY 2014
		(Thou. \$)		(Thou. \$)		(Thou. \$)
Direct obligations for facility energy efficiency improvements, including facility surveys/audits		\$830.0		\$1,200.0		\$1,000.0
Estimated annual energy savings anticipated from obligations (Million BTU)	5,744.2	\$71.7	6,500.0	\$120.0	6,000.0	\$100.0
Estimated annual water savings anticipated from obligations (Thousands Gal)	347.0	\$0.9	5,000.0	\$13.4	0.0	\$0.0

Note: If funding is available in FY 2013 and FY 2014 for INL Strategic Investment Funded projects. (EF)

### 1-2. E.O. 13514/OMB Circular A-11 Awarded Energy Savings Performance Contracts (ESPCs)

Annual savings (10^6 BTU)  Number of ESPC Task/Delivery Orders awarded in fiscal year & annual energy (0.0)  (Million BTU) savings  Investment value of ESPC Task/Delivery Orders awarded in fiscal year  Amount privately financed under ESPC Task/Delivery Orders awarded in fiscal year  Cumulative guaranteed cost savings of ESPCs awarded in fiscal year relative to the baseline spending  Total contract award value of ESPCs awarded in fiscal year (sum of contractor payments for debt repayment, M&V, and other negotiated performance period services)  Total payments made to all ESPC contractors in fiscal year	(Number/Thou. \$)	
awarded in fiscal year & annual energy	0.0	0.0
	Orders awarded in	\$0.0
	\$0.0	
	\$0.0	
(sum of contractor payments for debt repay	yment, M&V, and	\$0.0
Total payments made to all ESPC contract	ors in fiscal year	\$2,267.8

### 1-3. E.O. 13514/OMB Circular A-11 Awarded Utility Energy Services Contracts (UESCs)

Number of UESC Task/Delivery Orders awarded in fiscal year & annual energy (Million BTU) savings (Million BTU) savings Investment value of UESC Task/Delivery Orders awarded in fiscal year Amount privately financed under UESC Task/Delivery Orders awarded in fiscal year Cumulative cost savings of UESCs awarded in fiscal year relative to the baseline spending Total contract award value of UESCs awarded in fiscal year (sum of payments for debt repayment and other negoti ated		(Number/Thou. \$)
Number of UESC Task/Delivery Orders awarded in fiscal year & annual energy (Million BTU) savings	0.0	0.0
Investment value of UESC Task/Delivery fiscal year	Orders awarded in	\$0.0
Amount privately financed under UESC T Orders awarded in fiscal year	\$0.0	
Cumulative cost savings of UESCs awarde relative to the baseline spending	\$0.0	
		\$0.0
Total payments made to all UESC contract	tors in fiscal year	\$0.0

### 1-4. EPAct 1992 Training

	(Number)	(Thou. \$)
Number of personnel trained in FY 2012/Expenditure	2	\$47.6

### **Energy Management Data Report**

Requirement(s): See tables

Instructions If applicable, complete cells with blue text and highlight the cell. The information requested is for completing DOE's Annual Energy Report.

Source Site/Lab All data reviewed, updated, and is correct for FY 2013 CEDR Report - Ernest Fossum 11/26/12

### 1-5a. EPAct 2005 Metering Of Electricity Use

(Note: If a building has an advanced and a standard meter, only account for the advanced meter. If a building has multiple meters, ensure the utility metered is accounted/reported only once)

A 3345	# of		Standard Meters			Advanced Meter		To	otal	
Fiscal Year	"Appropriate " Buildings Per EPAct 2005	# of Buildings with Standard Meters	of Purchased	Estimated Amount of On-Site Generate Electricity Metered (kWh/Yr)	with	of Purchased	Estimated Amount of On-Site Generate Electricity Metered (kWh/Yr)	Buildings with	Cumulative % of "Appropriate" Buildings Metered	Total % of Electricity Metered
2012 Report	69	41	59,987,601	0	39	48,721,248	0	80.0	115.9%	49.0%
2013 Planned	70	25	42,043,647	0	124	117,050,073	0	149.0	212.9%	70.0%
2014 Planned	71	25	42,043,647	0	125	124,471,361	0	150.0	211.3%	71.0%
2015 Planned	71	25	42,043,647	0	125	124,471,361	0	150.0	211.3%	71.0%

Note: The increase in meters installed in FY 2013 is wholly dependent upon funding and the decision to meter many NE buildings to compensate for EM buildings not metered - EF 11/27/12

### 1-5b. EISA 2007 Metering Of Natural Gas Use

(Note: If a building has an advanced and a standard meter, only account for the advanced meter. If a building has multiple meters, ensure the utility metered is accounted/reported only once)

	# of		Standard Meters			Advanced Mete	rs	To	otal	40.0000
Fiscal Year	"Appropriate " Buildings Per EPAct 2005	# of Buildings with Standard Meters	Estimated Amount of Purchased Natural Gas Metered (CF/Yr)	Estimated Amount of On-Site Generate Natural Gas Metered (CF/Yr)			Estim ated Amount of On-Site Generate Natur al Gas Metered (CF/Yr)		Cumulative % of "Appropriate" Buildings Metered	Total % of Natural Gas Metered
2012 Report	31	31	25,500,000,000	0	0	0	0	31.0	100.0%	100.0%
2013 Planned	32	32	26,000,000,000	0	0	0	0	32.0	100.0%	100.0%
2014 Planned	33	33	26,500,000,000	0	0	0	0	33.0	100.0%	100.0%
2015 Planned	33	33	26,500,000,000	0	0	0	0	33.0	100.0%	100.0%

### 1-5c. EISA 2007 Metering Of Steam Use

(Note. If a building has an advanced and a standard meter, only account for the advanced meter. If a building has multiple meters, ensure the utility metered is accounted/reported only once)

	# of		Standard Meters	ş		Advanced Meter	rs	To	tal	
Fiscal Year	"Appropriate " Buildings Per EPAct 2005	# of Buildings	Estimated Amount of Purchased Steam Metered (Btu/Yr)						Cumulative % of "Appropriate" Buildings Metered	Total % of Steam Metered
2012 Report	0	0	0	0	0	0	0	0.0	#DIV/0!	0.0%
2013 Planned	0	0	. 0	0	0	0	0	0.0	#DIV/0!	0.0%
2014 Planned	0	0	0	0	0	0	0	0.0	#DIV/01	0.0%
2015 Planned	0	0	0	0	0	0	0	0.0	#DIV/01	0.0%

### 1-5d. DOE O 436.1 & SSPP Metering Of Chilled Water Use

	# of		Standard Meters	s		Advanced Mete	rs	T	otal	Total % of
Fiscal Year	"Appropriate " Buildings Per EPAct 2005	# of Buildings with Standard Meters	of Purchased	Estimated Amount of On-Site Generate Chilled Water Metered (Btu/Yr)			Estimated Amount of On-Site Generate Chilled Water Metered (Btu/Yr)		Cumulative % of "Appropriate" Buildings Metered	Chilled Water Metered
2012 Report	0	0	0	0	0	0	0	0.0	#DIV/0!	0.0%
2013 Planned	0	0	0	0	0	0	0	0.0	#DIV/01	0.0%
2014 Planned	0	0		0	0	0		0.0	#DIV/0!	0.0%
2015 Planned	0	0	0	0	0	0	0	0.0	#DIV/0!	0.0%

### 1-5e. Water Management Best Practice Metering Of Water Use

	# of		Standard Meters			Advanced Mete		T	otal	
Fiscal Year	"Appropriate " Buildings Per EPAct 2005	# of Buildings	Estimated Amount of Purchased Water Metered (Gal/Yr)	of On Site Contured					Cumulative % of "Appropriate" Buildings Metered	Total % of Water Metered
2012 Report	16	16	40,000,000	0	0	0	0	16.0	100.0%	4.7%
2013 Planned	17	17	46,000,000	0	0	0	0	17.0	100.0%	5.4%
2014 Planned	18	18	52,000,000	0	0	0	0	18.0	100.0%	6.1%
2015 Planned	18	18	52,000,000	0	0	0	0	18.0	100.0%	6.1%

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## Facilities Utility/Fuel Consumption and Cost

Requirement(s): NECPA, EPAct 2005, EISA 2007, DOE O 436.1, E.O. 13514

Instructions: Provide FV 2012 quanterly consumption and associated cost information for facilities, non-fleet vehicles and equipment, and fully serviced leases (new, voluntary in FV 2012) by utility/find type and address SPO requests. On-site more-encounted on the interpretation of the interpretation on-recoverable energy should leave the energy should be reported in this 3.2 and 3.2b, respectively. FV 2012 granted in this 18.2 and 18.3 per energy should be reported in this 3.2 and 3.2b, respectively. FV 2012 granted for energy should be reported in this 3.2 and 3.2b, respectively. FV 2012 granted for energy should be reported in this 3.2 and 3.2b, respectively. FV 2012 granted for energy should be reported in this 3.2 and 3.2b, respectively. FV 2012 granted for the should be energiated for the should be entired to a final should be entired for the change in the "Additional Information" column.

Source: Site/Lab All data reviewed, updated, and is correct for FY 2013 CEDR Report - Ernest Fossum 11/14/12

	۰۵	1									l							ı				l		l																				
issions	Scope 3 - T&D Loss, MtCO2e	179.917	0.000	0.000	175.167	0.000	0.000	176.227	0.000	185.756	0.000	0.000	174.531	0.000	0.000	175.865	0.000	0.000	168.160	0.000	0.000	177.096	0.000	0.000	177.265	0.000	0.000	183.923	0.000	0.000	173.167	0.000	0.000	181.450	0.000	0.000	0.000	184.802	0.000	187.893	0.000	181.111	0.000	0.000
GHG Emi	Biogenic MfCO <sub>2</sub> e	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Estimated GHG Emissions	Anthropogenic MrCO <sub>2</sub> e	2,731.359	0.000	441.147	2,659.245	0.000	342.588	2,675,333	92.643	2,819,992	26.861	0.000	2,649.581	0.035	432.606	2,669.835	0.000	457.816	2,552.863	0.076	94.781	2,688.527	32.163	0.000	2,691.092	0.035	379.186	2,792.170	0.056	0.005	2,628.875	0.019	153,805	2,754.629	0.000	34.963	0.000	2,805.515	387,706	2,852.437	407.926	2,749,478	0.000	66.210
	Scope	2,7	0.0	1 44	2 2,6	0.0	1 34	2 2,6	1 92	2 2,8	1 26	NA 0.0	2 2,6	0.0	1 43.	2,6	0.0	1 45	2 2,3	0.0	1 94	2 2,6	1 32	NA 0.0	2 2,6	0.0	ZE 1	2,7	0.0	0.0	2 2,6	0.0	15.	2 2,7	0.0	1 34	NA 0.0	2 2,8	38 1	2 2,8	1 40	2,7	0.0	99 1
	SPO Notes	2			2	_		2						-					2		[		-	Ţ			1	2	1	1		1		2			_	7				2		
es	SP																																											
Notes	Additional Information																																											
	nit Main Site Zip Code	\$ 0.07 83415	NA 83415	0.01 83415	0.07 83415	NA 83415	0.01 83415	0.07 83415	0.01 83415	0.06 83415	\$ 0.01 83415	- 83415	0.07 83415	0.83 83415	0.01 83415	0.07 83415	NA 83415	0.01 83415	0.07 83415	\$ 1.38 83415	0.01 83415	\$ 0.06 83415	\$ 0.01 83415	- 83415	\$ 0.06 83415	\$ 1.38 83415	\$ 0.01 83415	\$ 0.06 83415	\$ 1.28 83415	\$ 1.28 83415	\$ 0.06 83415	\$ 1.34 83415	0.01 83415	0.06 83415	NA 83415	0.01 83415	- 83415	0.06 83415	0.01 83415	\$ 0.06 83415	0.01 83415	0.06 83415	NA 83415	0.01 83415
ŀ	S) S/Unit	\$ 0		\$ 0	\$ 0		8 0	0 \$	\$ 0	\$ 0	\$ 0	69	8 0	\$ 0	\$ 0	\$ 0	1332	0 \$	\$ 0	\$ 1	0 \$	\$ 0	\$ 0	S	\$ 0	\$ 1	0 \$	\$ 0	\$ 1	\$ 1	\$ 0	\$ 1	\$ 0	\$ 0	3 50	0 \$	S	\$ 0	0 \$	\$ 0	\$ 0	\$		\$ 0
	Cost (1,000 \$)	\$438.171	\$0.000	\$46.117	\$430.638	\$0.000	\$35.962	\$424.911	\$10.643	\$444.413	\$4.298		\$418.629	\$0.005	\$62.401	\$425.627	\$0.000	\$66.310	\$408.343	\$0.018	\$14.814	\$420.782	\$5.635		\$424.109	\$0.00	\$61.116	\$425,909	\$0.012	\$0.124	\$389.186	\$0.004	\$26.042	\$403.783	\$0.000	\$6.385		\$418.313	\$80.389	\$423.860	\$85.079	\$385.866	\$0.000	\$14.526
	BTU x 10~6	22,645.918	0.000	8,312,242	22,048.016	0.000	6,455.162	22,181.402	1,745.606	23,380.781	506.123		21,967.886	0.552	8,151,312	22,135.817	0.000	8,626.326	21,165.991	1.196	1,785.888	22,290.794	606.032		22,312.061	0.561	7,144.749	23,150.103	0.892	0.100	21,796.214	0.294	2,898.043	22,838.850	0.000	658.777		23,260.750	7,305,282	23,649.787	7,686.270	22,796.138	0.000	1,247.559
st	Usage Amount	6,637.139	00	8,085,839	6,461.904	0.000	6,279,340	6,500.997	1,698.060	6,852.515	492.338	1,127.600	6,438.419	0.006	7,929,292	6,487.637	0.000	8,391,368	6,203.397	0.013	1,737.245	6,533.058	589.525	1,050.646	6,539.291	90	6,950.145	6,784.907	0.010	2600	6,388.105	0.003	2,819.108	6,693.684	00	640.834	1,070.843	6,817.336	7,106.305	6,931.356	7,476.916	991.189	0.000	1,213.579
nption and Cost	QTR	9'9 1	00000	0'8 1	2 6,4								1 6,4		67 1											900'0 1									00000									
nsumptic	FY	2003	2003	t 2003 1	2003	2003 2	t 2003 2		t 2003 3	2003 4	t 2003 4	et 2003 4	2004	2004 1	t 2004 1	2004 2	2004 2		2004 3	2004 3	t 2004 3	2004 4	t 2004 4	st 2004 4	2005 1	2005 1		2005 2	2005 2	t 2005 2	2005 3	2005 3		2005 4	2005 4	t 2005 4	et 2005 4	2006 1	t 2006 1	2006 2	t 2006 2	2006		t 2006 3
Utility/Fuel Consur	Usage Unit	Megawatt Hour	1,000 Gallons	1,000 Cubic Feet 2003	Megawatt Hour	1,000 Gallons	1,000 Cubic Feet 2003	Megawatt Hour	1,000 Cubic Feet 2003	Megawatt Hour	1,000 Cubic Feet 2003	1,000 Square Feet 2003	Megawatt Hour	1,000 Gallons 2004	1,000 Cubic Fee	Megawatt Hour	1,000 Gallons	1,000 Cubic Feet 2004	Megawatt Hour	1,000 Gallons	1,000 Cubic Feet 2004	Megawatt Hour	1,000 Cubic Feet 2004	1,000 Square Feet 2004	Megawatt Hour	1,000 Gallons	1,000 Cubic Feet 2005	Megawatt Hour	1,000 Gallons	1,000 Cubic Feet 2005	Megawatt Hour	1,000 Gallons	1,000 Cubic Feet 2005	Megawatt Hour 2005	1,000 Gallons	1,000 Cubic Feet 2005	1,000 Square Feet 2005	Megawatt Hour	1,000 Cubic Feet 2006	Megawatt Hour 2006	1,000 Cubic Feet 2006	Megawatt Hour	1,000 Gallons	1,000 Cubic Feet 2006
	Subcategory	Electricity	LPG	Natural Gas	Electricity	LPG	Natural Gas	Electricity	Natural Gas	Electricity	Natural Gas	Square Feet	Electricity	LPG	Natural Gas	Electricity	LPG	Natural Gas	Electricity	LPG	Natural Gas	Electricity	Natural Gas	Square Feet	Electricity	LPG	Natural Gas	Electricity	LPG	Natural Gas	Electricity	LPG	Natural Gas	Electricity	Fuel Oil	Natural Gas	Square Feet	Electricity	Natural Gas	Electricity	Natural Gas	Electricity	LPG	Natural Gas
	Category	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings	Buildings
	Site	NLI	I.I.I	I.I.	INI-I	I-IN	I.I.	NLI	INL	I.I.	I'II	I-IN	NLI	I.I.	I-IN	IN	N.I.	INI	INI	IVIN	INI	IN	I-IN	I.I.I	IVIC1	INI	I-INI	INI-I			INI-I			INI-I	IVI-I	I-INI	INI	I-INI	INI	I-IN	I-IN	INI-1		NL-1
	PSO Site#	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602	NE 602		NE 602	NE 602	NE 602	NE 602		NE 602	NE 602	NE 602			NE 602

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50         84         64         Cueptry         Shakengey         Value (specified)         State (specified) <th></th> <th></th> <th></th> <th></th> <th>Utility/Fuel Consumption and Cost</th> <th>ption and</th> <th>Cost</th> <th></th> <th></th> <th></th> <th>Notes</th> <th></th> <th>Estimated</th> <th>Estimated GHG Emissions</th> <th>issions</th>					Utility/Fuel Consumption and Cost	ption and	Cost				Notes		Estimated	Estimated GHG Emissions	issions
Q00         Monthaling production and production	PSO		Site			1	Usage Amount	BTU x 10^6	Cost (1,000 S)		SPO Notes		Anthropogenic MtCO <sub>2</sub> e		
Q00         CMAP         Probable			INL-I Buildings	Natural Gas		8	3,276.528	3,368.271	\$29.092	\$ 0.01 83415		1 1	178.761	0.000	0.000
CM NLA I Buildings         Bicketic by         Review of the control of processes of the control of p				Potable		3	15.396		\$32.644	\$ 2.12 83415		-	00000	0.000	0.000
Q20         DNA-1 Building         Stunnel Open         1,000,000,000,000,000,000         3,115,000         0,000 </th <th></th> <td></td> <td></td> <th>Electricity</th> <td></td> <td>4</td> <td>9,047.672</td> <td>30,870.657</td> <td>\$464.488</td> <td>\$ 0.05 83415</td> <td></td> <td></td> <td>3,723.358</td> <td>0.000</td> <td>245.261</td>				Electricity		4	9,047.672	30,870.657	\$464.488	\$ 0.05 83415			3,723.358	0.000	245.261
Q12         PMAIR Dissibilitation         Separate Feet         11372 Dissibilitation         SERSON         <	POST.			Natural Gas	000	4	1,018.332	1,046.845	\$9.177	\$ 0.01 83415		1 5	55.558	0.000	0000
Q0.         NAL Market         Problète         Multier oblete         Notation         NAL Monte         NAL Market         Problète         Multier oblete         NAL Market         NAL Babilitage	E	2000		Square Feet	1,000 Square Feet 2010	4	1,315.720			æ		20	0000	0.000	0.000
0.0.         N.M. Buildings         Electricity         Meyanettibus         11,279-279         13,003,047-31         51,003,047-31	NE			Potable		) 4	22.119		\$48.192	\$ 2.18 83415		-	00000	0.000	0.000
Q.D. Milk Bubblings         Named Gas         Discoularie Feet         Named Gas         1 1000 Cubic Feet         1 000 Cubic Feet         1 100 Cubic Feet	E			Electricity		1 1	8,793.955	30,004.974	\$456.210	\$ 0.05 83415			3,284.453	0.000	216.350
600         No.         Designed         Misting collection         Possible         Misting collection         Misting collection <th>邑</th> <td></td> <td></td> <th>Natural Gas</th> <td></td> <td>1</td> <td>12,749.273</td> <td>13,106.253</td> <td>\$104.802</td> <td>\$ 0.01 83415</td> <td></td> <td>1 6</td> <td>595.575</td> <td>0.000</td> <td>0.000</td>	邑			Natural Gas		1	12,749.273	13,106.253	\$104.802	\$ 0.01 83415		1 6	595.575	0.000	0.000
QO.         INAL Ballidius         Electivity         Meyant Ball         2011 SA12         5 401 SA13         5 001 SA14	RE			Potable		1 1	8.450		\$22.038	\$ 2.61 83415			00000	0.000	0.000
602         INL-I Buildings         Neadled Collection         1,000 Collection         21,124,500/8         \$10,007         \$10,007         \$10,000	E			Electricity		1 2	8913.188	30,411.797	\$469.823	\$ 0.05 83415			3,328,986	0.000	219.284
60         INAL         Multion Gullone         211         7.486         318.200         8 1451         6 144         Month         Mile         Mile<	邑			Natural Gas	40000		12,464.016	12,813.008	\$103.073	\$ 0.01 83415		1 6	580.012	0.000	0.000
OCD         INL-1         Bindings         Electricity         Mayerent Hour         201.35 (\$18.859)         \$20.4804         \$5.008 \$8145         \$0.008 \$8145         \$1.000 \$1.004         \$1.0000 \$1.004         \$1.000 \$1.004         \$1.00		2000		Potable		1 2	7.408		\$18.620	\$ 2.51 83415			00000	0.000	0.000
602         NL-L         Buildings         Nammed Gas         1,000 Cubir Erea         201. 3         3,577.555         3,750.56         521.74         5 0.01 Sul13         9.02         1,000 Cubir Erea         201. 3         1,500.54.24         5 1,258.54.15         9.02         1,000 Cubir Erea         201. 3         1,155.0         3,502.850         5 0.03 Sul13         9.02         1,000 Cubir Erea         201. 4         1,155.0         3,502.850         5 0.03 Sul13         9.02         1,000 Cubir Erea         201. 4         1,155.0         3,502.850         5 0.03 Sul13         8 0.03 Sul13         9.00 Sul13 </th <th></th> <td></td> <td></td> <th>Electricity</th> <td></td> <td></td> <td>8,718.650</td> <td>29,748.034</td> <td>\$455.762</td> <td>\$ 0.05 83415</td> <td></td> <td></td> <td>3,256,328</td> <td>0.000</td> <td>214.498</td>				Electricity			8,718.650	29,748.034	\$455.762	\$ 0.05 83415			3,256,328	0.000	214.498
602         INJ. Water         Possible         Million Gallions         2011         11.556         5.268 85415         5.288 85415         6.000         0.000	E			Natural Gas	200	1 3	3,677.595	3,780.568	\$32.174	\$ 0.01 83415		1 2	200.642	0.000	0.000
602         INL-I Buildings         Electricity         Magrownt Hoar         2011 4         \$678.277         \$302.452         \$50.08 84145         \$6.008 84145         \$6.000         <	图			Potable		1 3	11.526		\$32.635				0000	0.000	0.000
602         INLI- Buildings         Named Gas         Lond Cable Feet         2113         69.58%         \$7.79%         \$ 6.01         84.43         9 0.00         4.531         0.00           602         INLI- Buildings         Brid         Aller Call Laber         1.010 Square Feet         20.11         1.515.50         8.71.39         \$5.44 8.9415         8.443         8.443         8.00         9.00         9.00           602         INLI- Buildings         Beatricity         Miller Callous         20.1         1.1497.50         1.241.07         \$8.448         \$ 5.048         8.448         \$0.00         9.00 </th <th></th> <td></td> <td></td> <th>Electricity</th> <td></td> <td></td> <td>9,678.327</td> <td>33,022.452</td> <td>\$502.896</td> <td></td> <td></td> <td></td> <td>3,614.757</td> <td>0.000</td> <td>238.108</td>				Electricity			9,678.327	33,022.452	\$502.896				3,614.757	0.000	238.108
602         INLI- Buildings         Square Feet         1,000 Square Feet         1,011 Square Feet         1,011 Square Feet         1,000 Square Feet         1,011 Square Feet         1,111 Square Square Feet         1,011 Square Sq	RE			Natural Gas	0.2	4		895.586	87.799			1 4	17.531	0.000	0.000
602         INL-I         Water         Feathle         Mallion callors         2011         7.357         5.1237         5.028 6415         6.020         0.000 </th <th></th> <td>2000</td> <td></td> <th>Square Feet</th> <td>1,000 Square Feet 2011</td> <td>4</td> <td>1,315.510</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>00000</td> <td>0.000</td> <td>0.000</td>		2000		Square Feet	1,000 Square Feet 2011	4	1,315.510						00000	0.000	0.000
602         INL-I Buildings         Electricity         Magnownt Hoar         20.1 S. 19.0.70         31.555.20         517.817         5 0.08 S4145         6 0.08 S4145         6 0.00		354.4		Potable		4	17.367		\$42.337				00000	0.000	0.000
602         INLI- Buildings         Natural Gas         Lood Cable Feet         11, 907-06x         12,41077         588-843         \$ 0.01 E413         \$ 0.01 E414         \$ 0.01 E4143         \$ 0.01 E4143         \$ 0.01 E4143         <	Æ			Electricity		1 1	9,189.703	31,355.267	\$473.817				3,432,261	0.000	226.086
602         NL-I. Water         Peuble         Mallion callolos         2012         3,513,00         2000         6000         <	图			Natural Gas	535	1 1	11,907,662	12,241.077	\$98,484	\$ 0.01 83415		1 6	549.658	0.000	0000
602         INL-I Buildings         Electricity         Megawart Hoar         2012 20 1,541,209         5184113         \$ 6048 6445         \$ 6008 6445         \$ 6008 6445         \$ 6008 6445         \$ 6008 6445         \$ 6008 6445         \$ 6008 6445         \$ 6008 6445         \$ 6000 6446	NE			Potable		1	6.751		\$17.396	2.58			00000	0.000	0000
602         INL-I. Buildings         Natural Gas         Location Calculate         10,541,704         10,541,704         10,541,704         10,541,704         10,541,704         10,541,704         10,041,704 <th< th=""><th>0.00</th><td></td><td></td><th>Electricity</th><td></td><td>2</td><td>9,454.203</td><td>32,257.741</td><td>\$484.113</td><td></td><td></td><td>****</td><td>3,531.049</td><td>0.000</td><td>232.594</td></th<>	0.00			Electricity		2	9,454.203	32,257.741	\$484.113			****	3,531.049	0.000	232.594
692         INL-I         Water         People         Mallion callors         2012         8.89         9.08         818.474         \$ 1.84149         0.000	100000	~ ~		Natural Gas	10000		10,551.794	10,847.244	\$77.613	0.01		1 5	575.685	0.000	0.000
602         INL-1         Buildings         Electricity         Megawart Hour         2012 358 078         \$ 6000         4 2000 5415         \$ 6000         4 2000 5415         \$ 6000         4 2000 5415         \$ 6000         5 6000 <th< th=""><th>NE</th><td>201</td><td></td><th>Potable</th><td></td><td></td><td>6.819</td><td></td><td>\$18.474</td><td>2.71</td><td></td><td>2</td><td>00000</td><td>0.000</td><td>0.000</td></th<>	NE	201		Potable			6.819		\$18.474	2.71		2	00000	0.000	0.000
602         INL-I Buildings         Natural Gas         1,000 Cable Feet         2,105.507         2,126.203         \$15.506         \$ 60.01 S0415         \$ 10.01 S0415         \$ 1.00 Cable Feet         \$ 1.00 Cable Fe	NE			Electricity		3	8,803.660	30,038.088	\$454.659	0.05			3,288.078	0.000	216.589
NL-1         Nuclear         Possible         Additions         Additi				Natural Gas		3	2,165.567	2,226.203	\$15.596	0.01		1 1	118.149	0.000	0.000
602         INL-I         Buildings         Electricity         Megavorat Hour         20.28.704         31,624.818         \$871.1172         \$ 0.05 \$8415         \$ 0.05 \$8415         \$ 0.05 \$8415         \$ 0.05 \$8415         \$ 0.00 <th>R</th> <td></td> <td></td> <th>Potable</th> <td></td> <td></td> <td>13.892</td> <td></td> <td>\$37,430</td> <td>2.69</td> <td></td> <td></td> <td>00000</td> <td>0.000</td> <td>0.000</td>	R			Potable			13.892		\$37,430	2.69			00000	0.000	0.000
602         INL-1 Buildings         Natural Gas         LOO Cable Feet         2012 81         \$6.58.96         \$ 0.01 82413         \$ 0.00         \$1.88.22         \$ 0.00           602         INL-1 Buildings         Square Feet         1,000 Square Feet         1,299.38         \$1.299.38         \$2.08.8413         \$1.00         \$0.00         \$0.00           602         INL-1 Buildings         LPG         1,000 Square Feet         1,000 S	NE	2011		Electricity		4	9,268.704	31,624.818	\$471,172	0.05		300	3,461.767	0.000	228.030
602         INL-I         Buildings         Square Feet         1,000 Square Feet         4,1299 SS         4,1299 SS         5 · 83415         8 · 83415         N · 84 SS         8 · 83415         N · 84 SS         8 · 83415         N · 84 SS         N · 84 SS <t< th=""><th>607</th><td>anes.</td><td></td><th>Natural Gas</th><td>1,000 Cubic Feet 2012</td><td>4</td><td>896.702</td><td>921.810</td><td>\$6.846</td><td>0.01</td><td></td><td>1 4</td><td>18.922</td><td>0.000</td><td>0.000</td></t<>	607	anes.		Natural Gas	1,000 Cubic Feet 2012	4	896.702	921.810	\$6.846	0.01		1 4	18.922	0.000	0.000
602         INL-I         Buildings         LPG         1,000 Gallons         2,007         84.364         \$2.018         \$2.20 83415         1         1         5.334         0,000           602         INL-I         Water         Potable         Anilian Gallons         2012         4         18.845         \$5.0271         \$ 2.67 83415         N         N         0,000         0,000		90 100		Square Feet	1,000 Square Feet 2012		1,299.958						0000	0.000	0.000
602 INL-I Water Potable Million Gallons 2012 4 18845 \$59.271 \$ 2.67 83415 NA 0.000 0.000	R			LPG		2	716.0	84.364	\$2.018	2.20		1 3	5.334	00000	0.000
		01 00		Potable			18.845		\$50.271	2.67			0000	0.000	0.000

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				n	Utility/Fuel Consumption and Cost	umption	and Co	st					Notes	tes		Estimated GHG Emissions	3HG Emis	ions
															_	10 m		
PSO	Site #	PSO Site# Site	Category	Subcategory	Usage Unit	FY	QTR	Usage Amount	BTU x 10^6	Usage Unit FY QTR Usage Amount BTU x 10^6 Cost (1,000 S) S/Unit	\$/Unit	Main Site Zip Code	Additional Information	SPO Notes	Scope	Anthropogenic MtCO <sub>2</sub> e	Biogenic MtCO <sub>2</sub> e	Anthropogenic Biogenic Scope 3 - T&D  MtCO <sub>2</sub> e MtCO <sub>2</sub> e Loss, MtCO <sub>2</sub> e
NE	604	MFC	Buildings	Fuel Oil	1,000 Gallons	2005 3	12;	127.437	17,586.306	\$231.739	\$ 1.82 83415	83415			-	1,312,343	0.000	0.000
NE	604	MFC	MFC Vehicles and Equipment Diesel	Diesel	1,000 Gallons	llons 2005 3 0.650	9.0		89.700	\$1.182	\$ 1.82 83415	83415			1	6.694	0.000	0.000
NE	604	MFC	Vehicles and Equipment Gasoline	Gasoline	1,000 Gallons	ons 2005 3	0.206		25.750	\$0.442	\$ 2.15 83415	83415			1	1.825	00000	0.000
NE	604	MFC	Buildings	Electricity	Megawatt Hour	Hour 2005 4		5,205.400	17,760.825	\$294324	\$ 0.06 83415	83415			2	2,142,161	0.000	141.106
NE	604	MFC	Buildings	Fuel Oil	1,000 Gallons	ons 2005 4 45.130	45.		6,227.940	\$103.437	\$ 2.29 83415	83415			1	464.748	0.000	0.000
NE	604	MFC	Buildings	Square Feet	1,000 Square Feet	are Feet 2005 4	570	570.357			\$ - 83415	83415			NA	0.000	0000	0.000
NE	604	MFC	Vehicles and Equipment Diesel	Diesel	1,000 Gallons	lons 2005 4		6 089'0	93.840	\$1.559	\$ 2.29 83415	83415			1	7.003	0.000	0.000
NIF	604	MED	MEC Validac and Danisment Gooding	Gorolina	1 000 Gallone	h 2000	9000		30.750	60 400	\$ 230 83415	83415				2.180	0000	0000

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Equipment(2) NEOPA, EDAL 2005, EDA 2007, DOE 0 456 I, E.O. 13514

Introduced Provide PT 2012 quarterly consumption and associated cost information for facilities, non-fleet vehicles and equipment, and fully serviced leases (new, volumery in PT 2012) by this philaphile type and address 200 requests. Once the non-ensemble energy should not be reported in this service of consideration of considera



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PSO Site#	e # Site	Category	Subcategory	Usage Unit	FY.	QTR Us	Usage Amount	BTU x 10^6	Cost (1,000 S)	\$/Unit	Main Site Zip Code	Additional Information	SPO Notes	Scope	Anthropogenic MtCO <sub>2</sub> e	Biogenic MtCO <sub>2</sub> e	Scope 3 - T&D
603	INL-S Buildings	uildings	Electricity	Megawatt Hour	2003 1	39,856.456		135,990.228	\$1,693.499	\$ 0.04 8	83415			2	16,401.992	0.000	_
603	INL-S Buildings	uildings	Fuel Oil		2003 1	975.228			\$887.941	\$ 0.91 8	83415			1	10,042.873	0.000	0.000
603	INL-S Bu	Buildings	ING	Billion BTUs	2003 1	1.015		1,015.000	\$7.441	\$ 7.33 83415	33415			1	53.938	0.000	0.000
603		uildings	LPG		2003 1	70.672			\$64.376	\$ 0.91 83415	33415			1	413.796	0.000	0.000
603	INL-S	Excluded	Electricity	Megawatt Hour	2003 1	9,812.000		33,478.544	\$388.512	\$ 0.04 83415	33415			2	4,037.899	0.000	265.980
603	INL-S Vé	INL-S Vehicles and Equipment	Diesel		2003 1	5.077		2	\$8.264	\$ 0.91 83415	33415			1	93.475	0.000	0.000
603		INL-S Vehicles and Equipment Gasoline	Gasoline	1,000 Gallons	2003 1	3.223		402.875	\$4.390	\$ 1.36 83415	33415			1	28.557	0.000	0.000
603	INL-S Ve	Vehicles and Equipment	LPG	1,000 Gallons	2003 1	0.224		20.608	\$0.193	\$ 0.86 83415	33415				1.312	0.000	0.000
603	INL-S Bu	Buildings	Electricity	Megawatt Hour	2003 2	41,913.725		143,009.630	\$1,738.468	\$ 0.04 83415	33415			2	17,248.613	0.000	1,136.183
603	INLS	Buildings	Fuel Oil	1,000 Gallons	2003 2	1,030,626		142,226.388	\$1,061.873	\$ 1.05 83415	33415			310	10,613.360	0.000	0.000
603	INL-S Buildings	uildings	LNG	Billion BTUs	2003 2	1.573		1,573.000	\$11.658	\$ 7.41 83415	33415			and the	83.591	0.000	0.000
603	INL-S Buildings	uildings	LPG	1,000 Gallons	2003 2	121 68 121		6,267.132	\$73,325	\$ 1.08 83415	33415				398.859	0.000	0.000
603	INL-S Excluded	Rcluded	Electricity	611	2003 2	8,650,700		29,516.188	\$394.013	\$ 0.05 83415	33415			2	3,559,993	0.000	234.500
603		INL-S Vehicles and Equipment	Diesel		2003 2	150.9		835.866	\$6,358	\$ 1.05 83415	33415			_	62.375	0.000	0.000
603	INL-S	Vehicles and Equipment	Gasoline	1,000 Gallons	2003 2	4.145		518.125	\$6.254	\$ 1.51 83415	33415				36.726	0.000	0.000
603		INL-S Vehicles and Equipment	DdT	1,000 Gallons	2003 2	0.381		35.052	\$0.433	\$ 1.14 83415	33415				2.231	0.000	0.000
603	INL-S Bu	Buildings	Electricity	Megawatt Hour	2003 3	34,095.499		116,333.843	\$1,221.730	\$ 0.04 83415	33415			2	14,031.205	0.000	924.250
603	INL-S Bu	Buildings	Fuel Oil	1,000 Gallons	2003 3	537.52		74,177.898	\$496.317	\$ 0.92 83415	33415			1	5,535.377	0.000	0.000
603	INL-S Bu	Buildings	LNG	Billion BTUs	2003 3	00000	000:0		\$0,000	NA 83415	33415			1	0.000	0.000	0.000
603	INL-S Buildings	uildings	IPG	1,000 Gallons	2003 3	20.537		1,889.404	\$18.850	\$ 0.92 83415	83415			1	120.247	0.000	0.000
603		Rcluded		11	2003 3	8,898.200	200		\$319.195	\$ 0.04 83415	33415			2	3,661.846	0.000	241.209
603		INL-S Vehicles and Equipment	Diesel	1,000 Gallons	2003 3	8.351		1,152.438	\$7,711	\$ 0.92 83415	33415			-	85.998	0.000	0.000
603	INL-S Ve	INL-S Vehicles and Equipment Gasoline	Gasoline		2003 3	3,285		410.625	\$4.675	\$ 1.42 83415	33415			1	29.106	0.000	0.000
603	INT-S	Vehicles and Equipment	LPG	1,000 Gallons	2003 3	0.201		18.492	\$0.207	\$ 1.03 83415	33415				1.177	0.000	0.000
603	INL-S Buildings	nildings	Electricity	Megawatt Hour	2003 4	32,770.492		111,812,919	\$928.420	\$ 0.03 83415	33415			63	13,485.929	0.000	888.332
603	INT-S	Buildings	Fuel Oil	220	2003 4	278.153		38,385.114	\$270.485	\$ 0.97 83415	33415				2,864.412	0.000	0.000
603	INL-S Bu	Buildings	ING	Billion BTUs	2003 4	0.481		481.000	\$3,500	\$ 7.28 8	83415				25.561	0.000	0.000
603	INL-S	Buildings	LPG	1,000 Gallons	2003 4	20.516		1,887.472	\$19.810	\$ 0.97 83415	33415				120.124	0.000	0.000
603		uildings	Square Feet	늉	2003 4	4,464.917	517			. 69	83415			NA	0.000	0.000	0.000
603		rcluded	Electricity	Megawatt Hour	2003 4		0	24,565.035	\$222.687	\$ 0.03 83415	33415				2,962.827	0.000	195.164
603	INL-S Excluded	rcluded	Square Feet	1,000 Square Feet	2003 4	147.325	25			. \$	83415			NA	0.000	0.000	0.000
603	INL-S Ve	Vehicles and Equipment	Diesel		2003 4	12.411		1,712,718	\$12.068	\$ 0.97 83415	33415				127.808	0.000	0.000
603	INL-S	Vehicles and Equipment Gasoline	Gasoline		2003 4	4.115		514.375	\$6.439	\$ 1.56 83415	33415				36.460	0.000	0.000
603		INL-S Vehicles and Equipment	LPG	1,000 Gallons	2003 4	0.406	37.352		\$0.373	\$ 0.92 83415	33415				2.377	0.000	0.000
603	NL-S	nd Equipment	Other		2003 4	00000	00000		\$0.000	NA 8	83415			-	0.000	0.000	0.000
603	INL-S	Buildings	Electricity	Megawatt Hour	2004 1	42,720.480		145,762.278	\$1,722.012	\$ 0.04 83415	33415			2	17,580.614	0.000	1,158.053
603	INL-S Buildings	nildings	Fuel Oil	5250	2004 1	652.342		90,023.196	\$647.671	\$ 0.99 83415	33415			-	6,717.801	0.000	0.000
603	INL-S Buildings	uildings	LNG	Billion BTUs	2004 1	1.052		1,052.000	\$8.096	\$ 7.70 83415	33415			1	55.904	0.000	0.000
603	INT-S	Buildings	LPG	1,000 Gallons	2004 1	39.016		3,589.472	\$40.019	\$ 1.03 83415	33415			1	228.445	0.000	0.000
603	INI-S	Vehicles and Equipment	Diesel	1,000 Gallons	2004 1	4.921			\$7.529	\$ 1.53 83415	33415			1	50.676	0.000	0.000
603	INL-S Ve	INL-S Vehicles and Equipment	Gasoline	1,000 Gallons	2004 1	0.865		108.125	\$4.921	\$ 5.69 83415	33415		SPO Request: Please review cost, val 1		7.664	0.000	0.000
603		INL-S Vehicles and Equipment LPG	LPG	1,000 Gallons	2004 1	0.568	52.256		\$0.545	\$ 0.96 83415	33415			1	3.326	0.000	0.000

			n	Utility/Fuel Consumption and Cost	sumption and	l Cost				Notes	es		Estimated GHG Emissions	HG Emissi	suc
PSO	Site # Site	Category	Subcategory	Usage Unit	FY QTR	Usage Amount	BTU x 10^6	Cost (1,000 S)	\$'Unit Zip Code	AdditionalInformation	SPO Notes	Scope	Anthropogenic MtCO <sub>2</sub> e	Biogenic MtCO <sub>2</sub> e	Scope 3 - T&D Loss, MtCO2e
	603 INL-S	Buildings	Fuel Oil	1,000 Gallons	2004 2	1,011.117	139,534 146	\$1,051.909	\$ 1.04 83415			1 10		7 I	000
	603 INL-S	INL-S Buildings	ING	Billion BTUs	2004 2	1.431	1,431.000	\$11.372	\$ 7.95 83415			1 76			0.000
NE 6	603 INL-S		LPG	1,000 Gallons	2004 2	60.784	5,592.128	\$64.661	\$ 1.06 83415			1 35			0.000
		Vehicles and Equipment	Diesel	1,000 Gallons	2004 2	10.617	1,465.146	\$17.008				1			0.000
N N	603 INL-S	INL-S Vehicles and Equipment	Gasoline	1,000 Gallons	2004 2	1.174	146.750	\$1.890	\$ 1.61 83415			1 1	10.402 (	0.000	0.000
			Electricity	Megawatt Hour	2004 3	39,330,580	134,195,939	\$1.716.527				2 16	580		1.066.160
		Buildings	Fuel Oil	1,000 Gallons	2004 3	324.853	44,829.714	\$476.340				1 3,			0.000
	603 INL-S		ING	Billion BTUs	2004 3	0.000	00000	\$0,000	NA 83415			1 0.			0.000
NE 0	603 INL-S	INL-S Buildings	LPG	1,000 Gallons	2004 3	7.236	665.712	\$6.912	\$ 0.96 83415			1 42			0.000
NE 6	603 INL-S	INL-S Vehicles and Equipment	Diesel	1,000 Gallons	2004 3	18 662	2,575.356	\$34.331	\$ 1.84 83415			1 18	1		0.000
		INL-S Vehicles and Equipment Gasoline	Gasoline	1,000 Gallons	2004 3	1.119	139.875	\$2.073	\$ 1.85 83415			_			0.000
		INL-S Vehicles and Equipment LPG	LPG	1,000 Gallons	2004 3	0.220	20.240	\$0.000			SPO Request: Please review/confirm				0.000
		INL-S Buildings	Electricity	Megawatt Hour	2004 4	34,453.850	117,556.536	\$1,725.620	\$ 0.05 83415			2 12	· .		933.964
		Duldings	Fueron	L'uco Gallons	4 4007	541.977	47,192.820	\$470.733				ń ;	07		0.000
		INL-S Buildings	LNG	Billion BTUS	2004 4	07/0	7.70.000	\$6.149	\$ 7.99 83415			1 4(		0,000	0.000
		Buildings	DATE OF THE PERSON OF THE PERS	1,000 Gallons		3,000,000	1,022.028	\$11.839	\$ 1.07 83413						000
		Buildings	Square Feet	1,000 Square Feet		3,999.966						NA 0.			0,000
		INL-S Vehicles and Equipment	Diesel	1,000 Gallons	2004 4	14.689	2,027,082	\$20.219	\$ 1.38 83415			2 .		0,000	0.000
NE NE			Gasoline	1,000 Gallons	2004 4	1.387	198.373	\$4.840	\$ 1.79 85415 \$ 0.00 02416						0.000
	603 IMI 9	INL-S Vehicles and Equipment	547	Diffice Parts	2004 4	0.403	97.070	\$0.000	A U.50 6341.3			7 0	0000	0.000	0.000
		Paritimos and Equipment	Flectricity	Memorate Hour	2004 4	38 566 750	131 588 045	\$1 696 964	R 0.04 83415			9 14	038		1.045.441
		INL-S Buildings	Fueloil	1 000 Gallons	2005 1	545 020	75.212.760	\$773 394				1 5			0000
		INL-S Buildings	LNG	Billion BTUs	2005 1	0.783	783.000	\$7.019				1 41			0.000
		Buildings	LPG	1,000 Gallons	2005 1	61.686	5,675.112	\$77.500	\$ 1.26 83415			1 36			0.000
		Vehicles and Equipment	Diesel	1,000 Gallons	2005 1	18.820	2,597.160	\$26.707	\$ 1.42 83415			1 15			0.000
		INL-S Vehicles and Equipment Gasoline	Gasoline	1,000 Gallons	2005 1	1.041	130,125	\$1.907	\$ 1.83 83415			1 9.			0.000
NE 6		INL-S Vehicles and Equipment	LPG	1,000 Gallons	2005 1	0.216	19.872	\$0.254	\$ 1.18 83415			1 1.			0.000
NE 0	603 INL-S	Buildings	Electricity	Megawatt Hour	2005 2	45,672.200	155,833.546	\$2,011.355	\$ 0.04 83415			2 18	18,795.325	0.000	1,238.067
NE 6	603 INL-S	INL-S Buildings	Fuel Oil	1,000 Gallons	2005 2	882.028	121,719.864	\$1,223.776	\$ 1.39 83415			1 9,	9,083.101	0.000	0.000
NE 6		Buildings	LNG	Billion BTUs	2005 2	1.500	1,500.000	\$15.339	\$ 10.23 83415			1 78			0.000
NE 6	603 INL-S	Buildings	LPG	1,000 Gallons	2005 2	71.230	6,553.160	\$85.898	\$ 1.21 83415			1 41	417.063		0.000
		INL-S Vehicles and Equipment	Diesel	1,000 Gallons	2005 2	18.327	2,529.126	\$25.427				1 18			0.000
		Vehicles and Equipment	Gasoline	1,000 Gallons	2005 2	4.256	532.000	\$7.545				1 37	_		0.000
	NL-S	Vehicles and Equipment	LPG	1,000 Gallons	2005 2	0.254	23.368	\$0.037	\$ 0.15 83415			1		0000	0.000
NH NH	603 INTS	INL-6 buildings	Fiel Oil	1 000 Gallons	2005 3	335.490	46 297 620	\$4,867.073	\$ 182 83415			3 -	3 454 867		0.000
		INL-S Buildings	LNG	Billion BTUs	2005 3	0.381	381,000	\$4.118	\$ 10.81 83415			1 20			0.000
NE 6	603 INL-S	INL-S Buildings	LPG	1,000 Gallons	2005 3	32.222	2,964.424	\$39.170	\$ 1.22 83415			1 18			0.000
NE 6	603 INL-S	INL-S Vehicles and Equipment	Diesel	1,000 Gallons	2005 3	37.050	5,112.900	\$67.373	\$ 1.82 83415			1 36	,		0.000
			Gasoline	1,000 Gallons	2005 3	4.713	589.125	\$10.108				1 41			0.000
		nd Equipment	LPG	1,000 Gallons	2005 3	0.339	31.188	\$0.385				1 1.			0.000
		INL-S Buildings	Electricity	Megawatt Hour	2005 4	38,446.010	131,177.786	\$2,015.358				2 15	9	0,000	1,042.182
		INL-S Buildings	FuelOil	1,000 Gallons	2005 4	243.432	33,593.616	\$557.939	\$ 2.29 83415			1 2,	26		0.000
		Buildings	LNG	Billion BTUs	2005 4	1.245	1,245.000	\$17.929				1			0.000
		INL-S Buildings	LPG	1,000 Gallons		6.627	609.684	\$8.848	32					0.000	0.000
		Buildings	Square Feet	1,000 Square Feet		3,828.074		00000	, 0			NA 0.			0.000
NE PA		Vehicles and Equipment	Diesel	1,000 Gallons	2005 4	21.408	2,954.304	\$49.066	\$ 229 83415			1 .	5		0.000
	603 INL-S	INL-S Vehicles and Equipment Gasoline INIS Vehicles and Equipment T.P.G.	Gasoline T.D.?	1,000 Gallons	2005 4	3.948	17 572	\$9.432	\$ 2.39 83415			6 - 	1118	0000	0.000
		INL-S Buildings	Electricity	Megawatt Hour	2006 1	54,299.080	185,268.461	\$2,483.429	\$ 0.05 83415			2 22	516		1,471.921

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				Utility/Fuel Con	msumption and Cost	nd Cost				Notes	s		Estimated GHG Emissions	3HG Emissic	ıns
PSO	Site #	Site Category	Subcategory	Usage Unit	FY	QTR Usage Amount	BTU x 10^6	Cost (1,000 \$)	\$'Unit Zip Code	AdditionalInformation	SPO Nates	Scape	Anthropogenic MtCO <sub>2</sub> e	Biogenic MtCO <sub>2</sub> e	Scape 3 - T&D Loss, MtCO2e
NE	603	INL-S Buildings	Fuel Oil	1,000 Gallons	2006 1	849.620	117,247.560	\$1,751.031	\$ 2.06 83415			1 8		-	0.000
NE	603	INL-S Buildings	LNG	Billion BTUs	2006 1	1.090	1,090.000	\$12.191	\$ 11.18 83415			1 5.			0.000
빞	603	INL-S Buildings		1,000 Gallons	2006 1	36.576	3,364.992	\$54.352	\$ 1.49 83415			1 2			0.000
E	603	INL-S Vehicles and Equipment	ment Diesel	1,000 Gallons	2006 1	21.693	2,993.634	\$44.716	\$ 2.06 83415			1 2	**		0.000
일 !	603	INL-S Vehicles and Equipment Gasoline	ment Gasoline	1,000 Gallons	2006 1	5.520	690.000	\$11.692	\$ 2.12 83415			1 .			0.000
A P	603	INL-S Venicles and Equipment		1,000 Gallons	1 9002	90309	107 004 003	\$0.449	\$ 0.05 82415			c	1,809	0000	1 525 434
A P	500	INT.S Buildings	Fire Oil	1 000 Gallons	2 0002	1 077 369	148 676 922	\$2,030,032	\$ 0.00 83415 \$ 1 07 83415			2 1			0.000
見	603	INL-S Buildings	LNG	Billion BTUs	2006 2	1.180	1,180.000	\$13.555				. 1			0.000
핖	603	INL-S Buildings	LPG	1,000 Gallons	2006 2	64.852	5,966.384	\$94.476	\$ 1.46 83415			1 3			0.000
NE	603	INL-S Vehicles and Equipment Diesel	ment Diesel	1,000 Gallons	2006 2	41.377	5,710.026	\$79.407	\$ 1.92 83415			1 4.	426.099		0.000
핅	603	INL-S Vehicles and Equipment Gasoline	ment Gasoline	1,000 Gallons	2006 2	3.318	414.750	\$7.135	\$ 2.15 83415			1 23			0.000
E	603	INL-S Vehicles and Equipment		1,000 Gallons	2006 2	0.130	11.960	\$0.200	\$ 1.54 83415			1 0			0.000
빞	603	INL-S Buildings	Electricity	Megawatt Hour	2006 3	44,109.340	150,501.068	\$2,144.169	\$ 0.05 83415			2 11	7		1,195.701
E	603	INL-S Buildings	Fuel Oil	1,000 Gallons	2006 3	401.682	55,432.116	\$892.512	\$ 2.22 83415			1 4,			0.000
빞	603	INL-S Buildings	LNG	Billion BTUs	2006 3	0.410	410.000	\$4.188	\$ 10.21 83415			1 2			0.000
E	603	INL-S Buildings	LPG	1,000 Gallons	2006 3	26.963	2,480.596	\$39.346	\$ 1.46 83415			1 1			0.000
閚	603	INL-S Vehicles and Equipment	ment Diesel	1,000 Gallons	2006 3	36.384	5,020.992	\$80.842	\$ 2.22 83415			1 3.	_		0.000
H	603		ment Gasoline	1,000 Gallons	2006 3	5.488	000'989	\$14.307	\$ 2.61 83415			1 41	10	0.000	0.000
出	603	INL-S Vehicles and Equipment	ment LPG	1,000 Gallons	2006 3	0.250	23.000	\$0.382	\$ 1.53 83415			1			0.000
出	603	INL-S Vehicles and Equipment		Billion BTUs	2006 3	36.384	36,384.000	\$80.842	\$ 2.22 83415			1 0			0.000
빞	603	INL-S Buildings	Electricity	Megawatt Hour	2006 4	36,878.150	125,828.248	\$845.342	\$ 0.02 83415			2 1	0		999.681
빞	603	INL-S Buildings	Fuel Oil	1,000 Gallons	2006 4	130.260	17,975.880	\$285.270	\$ 2.19 83415				414		0.000
H	603	INL-S Buildings	LNG	Billion BTUs	2006 4	0.000	0.000	\$0.000	- 1			1 0			0.000
빞	603	INL-S Buildings	LPG		2006 4	1.777	163.484	\$3.018	\$ 1.70 83415						0.000
빞	603	INL-S Buildings	Square Feet		eet 2006 4	4,193.801			\$ - 83415						0.000
H	603	INL-S Excluded	Square Feet	1,000 Square Feet	£ 2006 4	147.325			\$ - 83415			NA 0			0.000
빞	603	INL-S Vehicles and Equipment Diesel	ment Diesel	1,000 Gallons	2006 4	33.283	4,593.054	\$72.890				1 3			0.000
E	603	INL-S Vehicles and Equipment Gasoline	ment Gasoline	1,000 Gallons	2006 4	5.494	686.750	\$14.760	\$ 2.69 83415			1.4			0.000
빞	603	INL-S Vehicles and Equipment		1,000 Gallons	2006 4	0.228	20.976	\$0.335	\$ 1.47 83415			1			0.000
岁!	603	INL-S Buildings	Electricity	Megawatt Hour	2007 1	43,203.290	147,409.625	\$961.022	\$ 0.02 83415			2	33		1,171.140
E I	603	INL-S Buildings	Fuel Oil	1,000 Gallons	2007	775.181	106,974.978	\$1,634.985	\$ 2.11 83415			1 .	94		0.000
H H	603	INL-S Buildings	LNG	1 000 Gallons	2007	1.326	1,326,000	\$12,530	\$ 9.45 85415				367.473	0000	0.000
出	603	INL-S Excluded	Electricity	Megawatt Hour	2007	9,293.400	31,709.081	\$206.783	\$ 0.02 83415			2 3			251.922
出	603	INL-S Vehicles and Equipment	ment Diesel	1,000 Gallons	2007 1	37,434	5,165.892	\$101.346	\$ 271 83415			1 33			0.000
E	603	INL-S Vehicles and Equipment Gasoline	ment Gasoline	1,000 Gallons	2007 1	5.289	661.125	\$11.805	\$ 2.23 83415			1 4	46.863	0.000	0.000
田田	603	INL-S Vehicles and Equipment	ment LPG	1,000 Gallons	2007 1	0.000	0.000	\$0.000	NA 83415			1 0	0.000	0.000	0.000
NE	603	INL-S Water	Aquifer Replinish		2007 1	0.000	#N/A	\$0.000	NA 83415			0			0.000
빞	603	INL-S Water	Potable	Million Gallons	2007 1	246.441		\$0.000				A			0.000
됩!	603	INL-S Buildings	Electricity	Megawatt Hour	2007 2	46,818.570	159,744.961	\$1,044.709	\$ 0.02 83415			2	18		1,269.142
큄	603	INL-S Buildings	Fuel Oil	1,000 Gallons	2 1002	307.528	115,878,704	\$1,040.156	\$ 10.99 85415			× 0	8,497,971	0.000	0.000
E E	602	nar e Buildings	500	1 000 Golfons	2 1002	207.702	915050	\$127.517	\$ 151 02415						0,000
THE PERSON NAMED IN	203	DIT o Evoluded	Ti company	Mosement House	2 1002	0.708.200	22.421.450	\$132,311					ç		365 606
a H	603	Titles Makisles and Emisses at	-	1 000 Gallon	2 1002	7,130.200	5 600 150	\$01.027	4 1 00 02415			y -			0000
ž į	500	INI.S Vahioles and Roumment Geoline	man Carolina	1,000 Gallons	2 0002	4161	520.125	\$8.047	\$ 2.15 83415						0.000
E E	500	INTS Vehicles and Equipment	ment 1.0G	1,000 Gallons	2007 2	1.574	144 808	\$3.563	\$ 2.26 83415						0.000
世	603	INL-S Water	Aquifer Replinish		2007 2	0.000	#N/A	\$0.000	NA 83415			0			0.000
NE	603	INL-S Water	Potable	Million Gallons	2007 2	230.427		\$0.000	\$ - 83415			NA 0	0.000		0.000
H	603	INL-S Buildings	Electricity	Megawatt Hour	2007 3	34,800.950	118,740.841	\$835.574	\$ 0.02 83415			2 1-	14,321.517 (	6 00000	943.373
贸	603	INL-S Buildings	Fuel Oil	1,000 Gallons	2007 3	384.221	53,022.498	\$867.263	\$ 2.26 83415			1 3,	3,956.698	0.000	0.000

	-			Utility/Fuel Consumption and Cost	sumption a	and Cost				Notes	SC		Estimated GHG Emissions	3HG Emissic	suc
PSO	Site # Site	te Category	Subcategory	Usage Unit	FY Q1	QTR Usage Amount	BTU x 10^6	Cost (1,000 \$)	\$'Unit Zip Code	AdditionalInformation	SPO Notes	Scope	Anthropogenic MtCO2e	Biogenic MtCO2e	Scope 3 - T&D Loss, MtCO2e
出		-S Buildings	LNG	Billion BTUs	2007 3	0.431	431.000	\$3.697	\$ 858 83415			1 22			0.000
出	603 INL-	INL-S Buildings	TDG	1,000 Gallons	2007 3	21.783	2,004.036	\$33.997	\$ 1.56 83415			1 12.		0.000	0.000
범		INL-S Excluded		Megawatt Hour	2007 3	4,980.100		\$138.924	0.03			2 2,0	4		134.999
빞		INL-S Vehicles and Equipment	Diesel	1,000 Gallons	2007 3	40.381	0	\$112.743				1 41:	0)		0.000
	603 INL-1	INL-S Vehicles and Equipment Gasoline https://doi.org/10.000/10.000	Gasoline	1,000 Gallons	2007 3	5.559	624.875	\$16.342	\$ 2.94 83415			1 49	49.255 (	0,000	00000
日日		Water		200000000000000000000000000000000000000	2007 3	0.000		\$0.000	NA 83415			0.0			0.000
图			Potable	Million Gallons	2007 3	247.955		\$0.000	\$ - 83415			NA 0.0			00000
NE		INL-S Buildings	Electricity	Megawatt Hour	2007 4	32,707.350	_	\$945.518	0.03				.945		886.620
NE	S-JMI 509	-S Buildings	Fuel Oil	1,000 Gallons	2007 4	163.382	22,546.716	\$390.696	\$ 2.39 83415			1 1,6	1,682.504	0.000	0.000
E		INL-S Buildings	LNG	Billion BTUs	2007 4	0.373	373.000	\$3.124	\$ 8.38 83415			1 19.			0.000
图		INL-S Buildings	LPG	1,000 Gallons		6.706	616.952	\$10.605	\$ 1.58 83415				11.02		0.000
R		-S Buildings	Square Feet	1,000 Square Feet		4,691.853			\$ - 83415			4			0.000
빞	603 INL-	INL-S Excluded	Electricity	Megawatt Hour	2007 4	7,499.400	25,587.953	\$221.906	\$ 0.03 83415			2 3,0	3,086.203	0.000	203.291
a H		and Eminement		1,000 Square rest	2007 4	147.217	7 118 868	\$140315	\$ 280 83415						0000
F F			Gasoline	1 000 Gallons	2007 4	7.106		\$19.731	278			1 62	5		0.000
밁		INL-S Vehicles and Equipment	TDG	1,000 Gallons	2007 4	0.031		\$0.069	\$ 2.23 83415			1 0.1			0.000
盟		-S Water	Aquifer Replinish		2007 4	0.000	#N/A	\$0.000	NA 83415			0.0			0.000
NE		INL-S Water	Potable	Million Gallons	2007 4	280.096		\$0.000	\$ - 83415			NA 0.0			0.000
NE		INL-S Buildings	Electricity	Megawatt Hour	2008 1	43,651.392	148,938.550	\$1,215.281	\$ 0.03 83415			2 17,	6		1,183.287
NE		INL-S Buildings	Fuel Oil	1,000 Gallons	2008 1	701.708	96,835.704	\$1,956.088	\$ 2.79 83415			1 7,2	7.1		0.000
빞		INL-S Buildings	ING	Billion BTUs	2008 1	1.065	1,065.000	\$8.803	\$ 8.27 83415			1 56.			0.000
出		INL-S Buildings	LPG	1,000 Gallons	2008 1	87.958		\$177,404	\$ 2.02 83415			1 51:			0:000
띩		Excluded	Electricity	Megawatt Hour	2008 1	8,683.100	-	\$248,467	\$ 0.03 83415			2 3,5	7		235.379
E		INL-S Vehicles and Equipment	Diesel	1,000 Gallons	2008 1	65.602	9	\$225.866	\$ 3.44 83415			1 67:	_		0.000
图		INL-S Vehicles and Equipment Gasoline	Gasoline	1,000 Gallons	2008 1	7.690		\$21.576	2.81			1 68	10		00000
일!		-S Vehicles and Equipment		1,000 Gallons	2008	0.184	16 928	\$0.453	\$ 2.46 83415			10			0.000
E !		INL-S Water	Aquiter Replinish		2008 1	0000	#N/A	\$0,000				0.0			0.000
월 !	603 INL-		Electricity	Megawatt Hour	2008 2	51,022.135	174,087.525	\$1,460.263	0.03			2 20		0.000	1,383.091
N N		INL-S Buildings	ruei Oii	1,000 Gallons Billion BTITs	2 8002	1 847	123,406.810	\$2,510.192	\$ 1484 83413			1 9,5	9,558,252		0.000
E E		-S Buildings	I.P.G	1 000 Gallons	2008 2	133.286	12.262.312	\$297.889	\$ 223 83415			1 78			00000
思			Electricity	Megawatt Hour	2008 2	8,076.200	27,555.994	\$245.470	\$ 0.03 83415			2 3,3	-		218.927
NE		INL-S Vehicles and Equipment	Diesel	1,000 Gallons	2008 2	69.785	9,630.330	\$240.116	\$ 3.44 83415			1 71:			0.000
NE				1,000 Gallons	2008 2	9.315	1,164.375	\$27.015	\$ 2.90 83415			1 82			0.000
빞		-S Vehicles and Equipment	TPG	1,000 Gallons	2008 2	0.520	47.840	\$1.216	\$ 2.34 83415			1 3.0			0.000
빞		INL-S Water	Aquifer Replinish		2008 2	0.000	#N/A	\$0.000	NA			0.0			0.000
빙		DAL-S Buildings	Electricity	Megawatt Hour	2008	36,772.060	125,466,269	\$1,138.853	0.03			2 15,	15,132,681		996 805
H H	FUND EURO	INL-S Buildings	TNG TNG	1,000 Gailons	2008	0.801	801 000	\$1,001.004	\$ 16.40 83415			1 4,7		0000	0.000
出出		INL-S Buildings	IPG	1,000 Gallons	2008 3	52.838	4,861.096	\$110.944	\$ 2.10 83415			1 30			0.000
图		INL-S Excluded	Electricity	Megawatt Hour	2008 3	7,349.900	0.	\$258,601	\$ 0.04 83415			2 3,0	3,024.679		199.239
图		INL-S Vehicles and Equipment	Diesel	1,000 Gallons	2008 3	47.580		\$200.026	\$ 4.20 83415			1 48	489.978 (		0.000
出		INL-S Vehicles and Equipment Gasoline	Gasoline	1,000 Gallons	2008 3	5.549	693.625	\$19.953	\$ 3.60 83415			1 49			0:000
NE		les and Equipment	LPG	1,000 Gallons	2008 3	1.911	175.812	\$4.416	\$ 2.31 83415			1 11	11.189 (		0.000
NE		INL-S Water	Aquifer Replinish		2008 3	0.000	#N/A	\$0.000	NA 83415			0.0			0.000
빞		INL-S Buildings	Electricity	Megawatt Hour	2008 4	32,347.107	0	\$1,158.826				2 13,	101		876.855
图		INL-S Buildings	Fuel Oil	1,000 Gallons	2008 4	145.372	336	\$523.818	\$ 3.60 83415			1,4	33.7		0.000
		INL-S Buildings	LNG	Billion BT Us	2008 4	0.000	0.000	\$0,000	NA P			1 0.0			0.000
H H	603 INL-S	INL-S Buildings	LPG	1,000 Gallons	2008 4	10.047	924.524	\$20.805	\$ 207 83415			1 58	28.82/	0000	0,000
TATE		обинания с-	Square rect	1,000 oquates ou	7 0007	4,570.710			c1+co - c						2007

			_	Utility/Fuel Con	Consumption and Cost	nd Cost				Notes	es		Estimated GHG Emissions	HG Emissi	suc
PSO	Site #	Site Category	Subcategory	Usage Unit	FY	QTR Usage Amount	BTU x 10^6	Cost (1,000 \$)	\$/Unit Zip Code	AdditionalInformation	SPO Notes	Scope	Anthropogenic MtCO.e	Biogenic MrCO,e	Scope 3 - T&D Loss, MtCO,e
NE	603 I	INL-S Excluded	Electricity	Megawatt Hour	2008 4	9,090,500	31,016.786	\$333.485	\$ 0.04 83415			2 3,7			246.422
NE NE		INL-S Excluded	Square Feet	1,000 Square Feet 2008	2008 4	147.325			\$ - 83415			NA 0.			0.000
图		INL-S Vehicles and Equipment		1,000 Gallons	2008 4	49.272	6,799.536	\$207.628	\$ 4.21 83415			1 50	2		0.000
NE		INL-S Vehicles and Equipment	Gasoline	1,000 Gallons	2008 4	7.743	367.875	\$29.306				1 68			0.000
E F		INL-S Vehicles and Equipment		1,000 Gallons	2008 4	0.489	44.988	\$1.261	\$ 2.58 83415			1 2.			0.000
a E	500	INL-5 water	Aquilet Repullion		5000	41 200 000	#N/A	\$0,000	PA OCA OCATE			5 5	0.000	0000	1,131,060
N E			Fuel Oil	1.000 Gallons	2009 1	41,369,002	82.690.566	\$1,433.289	202			1 6.			0.000
E		INL-S Buildings	ING	Billion BTUs	2009 1	1.642	1,642.000	\$19.403	\$ 11.82 83415			1 87			0.000
NE	603 I	INL-S Buildings	LPG	1,000 Gallons	2009 1	72.240	6,646.080	\$134.769	\$ 1.87 83415			1 42	422.976 0		0.000
NE	E03 I	IML-S Excluded	Electricity	Megawatt Hour	2009 1	7,924.200	27,037.370	\$300.159	\$ 0.04 83415			2 3,	3,261.019 0		214.807
NE		INL-S Vehicles and Equipment	: Diesel	1,000 Gallons	2009 1	53.973	7,448.274	\$158.650	\$ 2.94 83415			1 55		0,000	0.000
NE		INL-S Vehicles and Equipment	Gasoline	1,000 Gallons	2009 1	6.893	861.625	\$14.349	\$ 2.08 83415			1 61			000
		INL-S Vehicles and Equipment		1,000 Gallons	2009 1	0.289	26.588	\$0.658	\$ 2.28 83415			1			0.000
킾		INL-S water	Aquirer Kepimisn	1000000	1 6002	0.000	#N/A	\$0,000	NA 83415		TOO THE PERSON OF CHILD		0.000	0.000	0.000
TN I	509	INL-S water	Potable	Million Gallons	1 6002	203.833	2 50 000 000	\$0,000			SPO Kequest. Please provide F1 200 N.P.				0.000
		INL-S Buildings	Electricity	Megawait Hour	2 6002	40,180.239	100,000,128	\$1,703.093	\$ .			2 -	ŧ.		200.262,
ıl I		INL-S Buildings	Fuel Oil	1,000 Gallons	2 6002	196.994	109,985.172	\$1,239.650	\$ 1.56 8.5415			200	52		0.000
		INL-S Buildings	LNG	Billion BTUs	2 6002	1.310	1,310,000	\$15.107	\$ 11.53 83415			1 65		0,000	0.000
Z .		INL-S Buildings	The	1,000 Gallons	7 6002	114.980	71,002,060	\$220.423	\$ 1.92 83415			1 0			0000
E E	500	DATE S Valido and Toulonet Discol	Diegol	1 000 Cellera	2 6002	5,544.100	51,002.009	\$342,244	6 0.04 0341J			500	2,041,340		233.237
2 E		INL-S Vehicles and Equipment	Gasolina	1,000 Gallons	2 6002	3.001	8,404,338	\$155.552	\$ 2.19 83413 4 1 67 03413			1 6			0.000
1 1		TAT & Wahicles and Equipment		1,000 Gallons	2 0000	1,001	17.706	\$0.300	2 13						0000
i i		INI S Water		arman ooo's	2000	0000	#N(4	0000\$	NA 83415						0.000
1 1		TALL S Water	Potoklo	Million Gallons	2 0002	1577 0022	TENER	\$0,000	Š			MA			0000
a Pa			Fladminite	Magamet Hour	2 0000	23 016 046	115 791 546	\$1.226.690	6 0 M 03415			2 12	25.5		0.000
1		TIT C Duilding	End Oil	1 000 College	0000	272.440	51 524 720	6610.000	5 3			4 -			0000
E E		INL-S Buildings	LNG	Billion BTUs	2009 3	0.562	562.000	\$6.020	\$ 10.71 83415			1 25			0.000
NE			LPG	1,000 Gallons	2009 3	30.665	2,821.180	\$51.387	\$ 1.68 83415			1 17			0.000
NE		INL-S Excluded	Electricity	Megawatt Hour	2009 3	9,436.100	32,195.973	\$369.997	\$ 0.04 83415			2 3,1	9		255.791
NE	E03 I	INL-S Vehicles and Equipment	Diesel	1,000 Gallons	2009 3	55.260	7,625.880	\$120.476	\$ 2.18 83415			1 56	569.066 0	0.000	0.000
NE	E03 I	INL-S Vehicles and Equipment	Gasoline	1,000 Gallons	2009 3	7.218	902.250	\$15.423	\$ 2.14 83415			1 63	63.954 0		0.000
E	603 I	INL-S Vehicles and Equipment	: LPG	1,000 Gallons	2009 3	0.152	13.984	\$0.284	\$ 1.87 83415			1 0.1	0.890		0.000
NE	E03 I	INL-S Water	Aquifer Replinish		2009 3	0.000	#N/A	\$0.000	NA 83415			0)1			0.000
NE		INL-S Water	Potable	Million Gallons	2009 3	241.543		\$0.000	\$ - 83415			NA 0.1			0.000
NE		INL-S Buildings	Electricity	Megawatt Hour	2009 4	31,280.775	106,730.004	\$1,350.369	0.0			2 12	_	0.000	847.949
E		INL-S Buildings	Fuel Oil	1,000 Gallons	2009 4	99.334	13,708.092	\$199.552	\$ 2.01 83415			1 17	339		0.000
NE		INL-S Buildings	LNG	Billion BTUs	2009 4	0.000	0.000	\$0.000	NA 83415			1 0			0.000
E !			LPG	1,000 Gallons	2009 4	5.583	513.636	\$8.271	1.48						0.000
N N	500	INL-S Buildings	Eladmoits	1,000 Square Feet	2000	4,243.392	10747011	\$202 041	\$ 0.00 03415			NA O	3.363.400	0000	140 027
į			Smiste Feet	1 000 Sansare Feat	2009 4	147.325		10000000	3						0.000
N				1.000 Gallons	2009 4	55.203	7,618,014	\$137.478	2.49				0.		0 0 0 0
图			Gasoline	1,000 Gallons	2009 4	9.148	1,143.500	\$22.388				1 81			0.000
H	E03 I	INL-S Vehicles and Equipment	LPG	1,000 Gallons	2009 4	0.104	9.568	\$0.197	\$ 1.89 83415			1 0.0			0.000
NE	E03 I	INL-S Water	Aquifer Replinish		2009 4	00000	#N/A	\$0.000	NA 83415			10	0.000		0.000
H		INL-S Water	Potable	Million Gallons	2009 4	272.818		\$0,000	\$ - 83415			NA 0.1	0.000		0.000
NE	603 I	INL-S Buildings	Electricity	Megawatt Hour	2010 1	43,312.197	147,781.216	\$1,906.187	\$ 0.04 83415			2 17	17,824.121 0	0 000 1	1,174.093
NE		INL-S Buildings	Fuel Oil	1,000 Gallons	2010 1	643.937	88,863.306	\$1,368.915	\$ 2.13 83415			1 6,	46		0.000
E		INL-S Buildings	LNG	Billion BTUs	2010 1	1.597	1,597.000	\$22.166	\$ 13.88 83415			1 8			0.000
NE	e03 I	INL-S Buildings	LPG	1,000 Gallons	2010 1	86.099	7,921.108	\$146.432	\$ 1.70 83415			1 50	504.123 0	0.000	000

				Utility/Fuel Cons	Consumption and Cost	nd Cost				Notes	Sa		Estimated	Estimated CHG Emissions	ons
PSO Site#	Site	Category	Subcategory	Usage Unit	FY Q1	QTR Usage Amount	umt BTU x 10^6	Cost (1,000 \$)	\$/Unit Zip Code	Additional Information	SPO Notes	Scope	Anthropogenic MtCO <sub>2</sub> e	Biogenic MtCO <sub>2</sub> e	Scope 3 - T&D Loss, MtCO2e
NE 603	INL-S Excluded	E	Electricity	Megawatt Hour	2010 1	10,151.500	34,636.918	\$446.246	\$ 0.04 83415			2 ,	4,177.612	0.000	275.184
	INL-S Vehicles and Equipment		Diesel		2010 1	53.914	7,440.132	\$142.758	\$ 2.65 83415			1	555.205		0:000
NE 603	INL-S Vehicles and Equipment		Gasoline	1,000 Gallons	2010 1	5.542	692.750	\$13.507	\$ 2.44 83415			1 ,	49,104	0.000	0.000
NE 603	INL-S Vehicles and Equipment		LPG	1,000 Gallons	2010 1	0.173	15.916	\$0.283	\$ 1.64 83415			1	1.013		0.000
NE 603	INL-S Water	A	Aquifer Replinish	0 000	2010 1	0.000	#N/A	\$0.000	NA 83415				0.000	0,000	0.000
		ŭ i	orable	Million Gallons	1 0102	200.173	100 000 000	90,000				INA	0.000		0.000
NE 603	INL-S Buildings	i 6	Electricity  Energy	Megawatt Hour	2010 2	734 080	152,597.964	\$1,980.092	\$ 0.04 83415			7 -	18,405.07/	0.000	1,212.361
	INL-S Buildings		LNG	Eillion BTUs	2010 2	1.163	1,163.000	\$16.966	\$ 14.59 83415				61.803		0.000
	INL-S Buildings		LPG	1,000 Gallons	2 0102	138.743	12,764.356	\$284.386	\$ 2.05 83415			1	812.362		0.000
	INL-S Excluded	E	Electricity	Megawatt Hour	2010 2	9,728.600	33,193.983	\$422.460	\$ 0.04 83415			2	4,003.578	-	263.720
NE 603	INL-S Vehicles and Equipment		Diesel	1,000 Gallons	2010 2	62.970	098 689'8	\$175,713	\$ 2.79 83415			1	648,463	0.000	0.000
NE 603	INL-S Vehicles and Equipment	nd Equipment G.	Gasoline	1,000 Gallons	2010 2	7.699	962.375	\$20.211	\$ 2.63 83415			1.	68.216	0.000	0.000
	INL-S Vehicles and Equipment LPG	nd Equipment Ll	PG	1,000 Gallons	2010 2	0.145	13.340	\$0.299	\$ 2.06 83415			1	0.849		0.000
	INL-S Water	A	Aquifer Replinish		2010 2	0.000	#N/A	\$0.000	NA				0.000		0.000
NE 603	INL-S Water	Pt	Potable	Million Gallons	2010 2	179.782		\$0,000	\$ - 83415			NA (			00000
	INL-S Buildings	E	Electricity	Megawatt Hour	2010 3	34,370.462	117,272.016	\$1,436.247	\$ 0.04 83415			2	00	0.000	931.703
	INL-S Buildings	료	Fuel Oil	1,000 Gallons	2010 3	375.001	51,750.138	\$916,997	\$ 2.45 83415				51		0:000
NE 603	INL-S Buildings	n	LNG	Billion BTUs	2010 3	0.464	464.000	\$6.739	\$ 14.52 83415			1			0.000
	DNL-S Buildings	T	LPG	1,000 Gallons	2010 3	42.963	3,952.596	\$84.906	\$ 1.98 83415			1		0.000	0.000
	DIL-S Excluded		Electricity	Megawatt Hour	2010 3	7,961.700	27,165.320	\$355.370	0.0			2	1		215.823
	INL-S Vehicles and Equipment	nd Equipment D.	Diesel	1,000 Gallons	2010 3	33.385	4,607.130	\$88.470	\$ 2.65 83415			1			0.000
	INL-S Vehicles and Equipment Gasoline	nd Equipment G	asoline	1,000 Gallons	2010 3	6,708	838,500	\$19.169	\$ 2.86 83415				10.	0.000	0.000
	INL-S Vehicles and Equipment	- 1	LPG	1,000 Gallons	2010 3	0.130	11.960	\$0.258	\$ 1.98 83415			-			0.000
	INL-S Water	A	Aquifer Replinish		2010 3	0.000	#N/A	\$0.000	NA				0.000		0.000
		PC	Potable	Million Gallons	2010 3	193.682		\$0.000	c			NA (	0.000		0.000
	INL-S Buildings	E	Electricity	Megawatt Hour	2010 4	30,175.256	102,957.973	\$1,092.744	0.04			2	12,417.921		817.981
	INL-S Buildings	료	Fuel Oil		2010 4	141.708	19,555.704	\$332.015	\$ 2.34 83415				1,459.305		0.000
		a	LNG		2010 4	0.464	464.000	\$6.935	\$ 14.95 83415			_	24.657		0.000
	DAL-S Buildings		LPG	1,000 Gallons	2010 4	19.803	1,821.876	\$38.662	\$ 1.95 83415				115.950		0.000
	DAL-S Buildings		Square Feet	183	2010 4	4,129.511			\$ - 83415			NA (			0.000
	INL-S Excluded	国	Electricity		2010 4	10,222.800	34,880.194	\$377.256	0.04				954		277.116
	INL-S Excluded		Square Feet	eet		147.325		000000000000000000000000000000000000000	\$ - 83415			NA.	0.000	0.000	0.000
	INL-S Venicles and	Venicles and Equipment Di	Diesel		2010 4	46.891	6,474,000	\$136.008	\$ 2.50 83415				482.882		0.000
NE 603	INL-S Vencies and Equipment 12G	nd Equipment C.	Gasonne I.p.G	1,000 Gallons	2010 4	0.110	10.120	\$25.908	\$ 242 83415			-	0.581	0.000	0.000
	INL-S Water		Aquifer Replinish		2010 4	0.000	#N/A	\$0,000	NA 83415				0.000		0.000
NE 603	INL-S Water	Pc	Potable	Million Gallons	2010 4	222.763		\$0,000	\$ - 83415			NA	0.000		0.000
NE 603	INL-S Buildings	国	Electricity	Megawatt Hour	2011 1	41,240.704	140,713.282	\$1,539.387	\$ 0.04 83415			2	15,402.987		1,014.610
	INL-S Buildings	E	Fuel Oil	1,000 Gallons	2011 1	443.911	61,259.718	\$1,198.824	\$ 2.70 83415			-	4,571.384		0.000
	DAL-S Buildings	T	LNG	Billion BTUs	2011 1	0.925	925.000	\$13.559	\$ 14.66 83415			1	49.155		0.000
	INL-S Buildings	3   1	LPG	1,000 Gallons	2011 1	94 096	8,656.832	\$238.447	2.53				550.947		0.000
NE 903	INL-S Excluded		Electricity	Megawatt Hour	2011 1	8,644,100	29,493.669	\$526.589	\$ 0.04 83415			7 .	5,228.484	0000	212.003
	The Weldered Engineer Confine	nd Equipment O	nesei	1,000 Gallons	1 1102	5 150	646 196	\$12.502 \$12.502	\$ 3.65 03415				46.700		0000
	The Medical and Emission of the	nd Equipment 11	The	1 000 Gallons	1 1100	0.13	11 224	\$0.200	\$ 252 03415				0.714		0000
	INI.S Water		A quifer Rentinish	1,000 Calidia	2011 1	271.0	#N/A	\$0.000	V.J.				417.0		0000
	INIS Water	, d	Aquite replination	Million Gallons	2011 1	179 627	407	20 000	\$ - 83415			NA.			0000
		E	Electricity	Meoawatt Hour	2011 2	47 479 092	161 998 662.	\$1 776 477	8				2963	0000	1 168 088
	INL-S Buildings	। <u>स</u>	Fuel Oil	1,000 Gallons	2011 2	567.643	78,334.734	\$1,835.218				0 -		1000	0.000
NE 603	INL-S Buildings		LNG	Billion BTUs	2011 2	1.517	1,517.000	\$22.351	\$ 14.73 83415			1	80.615	0.000	0.000
NE 603	INL-S Buildings		LPG	1,000 Gallons	2011 2	138.607	12,751.844	\$375.866	\$ 2.71 83415			-	811.566		0.000

			n n	Utility/Fuel Con	onsumption and Cost	nd Cost			100			Notes	SS		Estimated GHG Emissions	HG Emissi	ons
PSO	Site # Site	Category	Subcategory	Usage Unit	FY QT	QTR Usag	Usage Amount BTU	BTU x 10^6 C	Cost (1,000 S)	\$'Unit Z	Main Site Zip Code	Additional Information	SPO Notes	Scope	Anthropogenic MtCO2e	Biogenic	Scope 3 - T&D Loss, MtCO2e
		1	Electricity	Megawatt Hour	2011 2	3,306.10	0	3		\$ 0.05 83415	115			2 1	5		81.337
			Diesel	1,000 Gallons	2011 2	46.397	6,402.786		1000	\$ 3.69 83415	115			1 4	780		0,000
			Gasoline	1,000 Gallons	2011 2	5.646	705.750			\$ 3.03 83415	115			1	v.		0.000
出	603 INL-S	INL-S Vehicles and Equipment	IPG	1,000 Gallons	2011 2	0.176	16.192	\$0.509		\$ 289 83415	115			-	1.031	0.000	0.000
			Aquiter Replinish Potable	Million Gallons	2011 2	149 791	#INA	\$0.000		S - 83415	115			AN			0.000
		Buildings	Aq	Megawatt Hour	2011 3	36,088.557	557 123,134.156		124	800	115				712		887.856
		Buildings		1,000 Gallons	2011 3	231.911				\$ 3.39 83415	115						00000
NE	603 INL-S		LNG	Billion BTUs	2011 3	0.573	573.000			\$ 13.71 83415	115			1 3			0.000
NE	603 INL-S	Buildings	LPG	1,000 Gallons	2011 3	46.468				\$ 2.57 83415	115			1 2	272.077 0		0,000
NE		Excluded	Electricity	Megawatt Hour	2011 3	8,808.700				\$ 0.04 83415	115			2 3	3,289.961		216.713
		Vehicles and Equipment		1,000 Gallons	2011 3	39.784	5,490.192				\$15			4	10		0.000
		Vehicles and Equipment	Gasoline	1,000 Gallons	2011 3	5.923	740.375			\$ 3.58 83415	115			1 5			0.000
	603 INL-S 603 INI 8	Vehicles and Equipment	LPG Amifar Danlinish	1,000 Gallons	2011 3	0000	0.000	\$0,000	000	NA 83415 NA 92415	115			- 0	0000	0000	0.000
		Water	Potable	Million Gallons	2011 3	212.791		\$0.000		\$ - 83415	115			NA			0000
		Buildings	Atj	Megawatt Hour	2011 4	31,167.91	1106,344,912		868	0.03	115				006		766.798
		Buildings		1,000 Gallons	2011 4	130.220					115						0.000
E	803 INL-S	Buildings	LNG	Billion BTUs	2011 4	0.000	0000	\$0.000	0(	NA 83415	115			1 0		0.000	0.000
NE	603 INL-S	Buildings	LPG	1,000 Gallons	2011 4	7.983	734.436		2000	\$ 2.53 83415	115			1 4	224.2		0.000
NE	603 INL-S	Buildings	Square Feet	1,000 Square Feet	2011 4	3,934.490	00		nd Gre	\$ - 83415	115			NA C			0.000
NE	603 INL-S	Excluded	Electricity	Megawatt Hour	2011 4	7,781.200	26,549.454	454 \$306.994	020	\$ 0.04 83415	115			2 2	2,906.200	0.000	191.434
NE	603 INL-S	INL-S Excluded	Square Feet	1,000 Square Feet 2011	2011 4	145.584			antil .	\$ - 83415	115			NA C	0.000	0.000	0.000
NE		Vehicles and Equipment	Diesel	1,000 Gallons	2011 4	65.828	9,084.264		500	\$ 3.79 83415	115			1 6	2		0.000
			Gasoline	1,000 Gallons	2011 4	6.529	816.125		0000	\$ 3.55 83415	£15			1 0	~		0.000
		es and Equipment	TPG	1,000 Gallons	2011 4	0.000	0.000	\$0.000	00	NA 83415	115			1 0			0.000
		Water	Aquifer Replinish	200	2011 4	0.000	#M/A	\$0.000		NA	115						0.000
				Million Gallons	2011 4	311.776				\$ - 83415	115			A			00000
			A	Megawatt Hour	2012 1	45,920.520		4	0	\$ 0.03 83415	115			2	-		1,129.744
		Buildings	Ŧ.	1,000 Gallons	2012 1	345.405			%	\$ 3.46 83415	115				72		0.000
		Buildings		Billion BTUs	2012 1	1 160				\$ 13.15 83415	\$15						0.000
H H	603 INL-S	INL-S Buildings	LPG	1,000 Gallons	2012 1	0100100	9,713.544	44 \$299.315		\$ 2.83 83415	£15				3 202 261	0000	0.000
		Vehicles and Equipment		1,000 Gallons	2012 1	45.076					115			1 2			0.000
R		Vehicles and Equipment		1,000 Gallons	2012 1	6.605	825.625			\$ 3.24 83415	115			1 5			0.000
NE	603 INL-S	Vehicles and Equipment	LPG	1,000 Gallons	2012 1	0.064	5.888	\$0.192		\$ 3.00 83415	115			1 0	0.375 0		0.000
NE	603 INL-S	Water	Aquifer Replinish		2012 1	0.000	#N/A	\$0.000	00	NA 83415	115			0			0.000
		Water		Million Gallons	2012 1	189.964				\$ - 83415	\$15			A			0.000
		Buildings	Electricity	Megawatt Hour	2012 2	49,041.243	glet.			\$ 0.04 83415	115			2	0		1,206.520
NE NE	603 INL-S	Buildings	Fuel Oil	1,000 Gallons	2 2012 2	1 247	1 247 000		245	\$ 3.24 83415	115			4 4	4,584,586	0.000	0.000
				1,000 Gallons	2012 2	144 231		0		\$ 2.76 83415	115						0.000
			Electricity	Megawatt Hour	2012 2	9,341,400				\$ 0.03 83415	115			2 3	3,488,919		229.819
NE		INL-S Vehicles and Equipment	Diesel	1,000 Gallons	2012 2	58.513	8,074.794	94 \$220.569	\$ 6951	\$ 3.77 83415	115			1 6	602.565 (	0.000	0.000
NE		Vehicles and Equipment	Gasoline	1,000 Gallons	2012 2	4.847	605.875		158	\$ 3.19 83415	115			1 4	10		0.000
E	603 INL-S	Vehicles and Equipment	LPG	1,000 Gallons	2012 2	0.035	3.220	\$0.108	38	\$ 3.09 83415	115			1 0	0.205		0.000
		Water	Aquifer Replinish		2012 2	0.000	#M/A	\$0.000	00	NA 83415	115						0.000
		Water		Million Gallons	2012 2	196.027				\$ - 83415	415			NA C			00000
			h	Megawatt Hour	2012 3	32,522.362		0	9/	\$ 0.04 83415	<b>‡15</b>			2 1	4		800.120
		Buildings	70	1,000 Gallons	2012 3	178.818		*		\$ 3.29 83415	415			-	53		0.000
멸!		Buildings		Billion BTUs	2012 3	0.682	682.000			\$ 15.18 83415	115						0.000
	603 INL-S	NL-S Buildings	LPG	1,000 Gallons	2012 3	29.135	2,680.420	20 \$73.097		\$ 2.51 83415	£15			1	170.590 (	0.000	0.000

				Utility/Fuel Con	onsumption and Cost	and Cost						Notes	¥.		Estimate	Estimated GHG Emissions	sions
PSO	Site #	Site Category	Subcategory	Usage Unit	Ĕ	QTR U	Usage Amount	BTU x 10^6	Cost (1,000 \$)	\$/Unit	Main Site Zip Code	AdditionalInformation	SPO Notes	Scope	e Anthropogenic MtCO <sub>2</sub> e	c Biogenic MtCO <sub>2</sub> e	Scope 3 - T&D Loss, MtCO2e
田田	603 D	INL-S Excluded	Electricity	Megawatt Hour	2012 3	5,165	5,169.200 17,6	17,637.310	\$211.421	\$ 0.04 8	83415			2	1,930.644	0.000	127.173
出	603 D	INL-S Vehicles and Equipment Diesel	Diesel	1,000 Gallors	2012 3	33.553	7	1,630.314	\$123.396	\$ 3.68 8	83415			-	345.528	0.000	0.000
出	603 B	INL-S Vehicles and Equipment Gasoline	Gasoline	1,000 Gallors	2012 3	5.264		658.000	\$18,916	\$ 3.59 8	83415			T	46.641	00000	00000
R	603 B	INL-S Vehicles and Equipment LPG	LPG	1,000 Gallons	2012 3	0.053	3 4.876		\$0,154	\$ 2.91 8	83415			1	0.310	0.000	0.000
出	603 II	INL-S Water	Aquifer Replinish		2012 3	0.000	0 #N/A		000 0\$	NA 8	83415				0.000	0.000	0.000
图	603 B	INL-S Water	Potable	Million Gallons	2012 3	176.961	961	**	\$0.000	69	83415			NA	0.000	0.000	0.000
빞	603 D	INL-S Buildings	Electricity	Megawatt Hour	2012 4	29,73	29,735.170 101,	101,456.400	\$1,154.635	\$ 0.04 8	83415			2	11,105.786	0.000	731.549
出	603 B	INL-S Buildings	Fuel Oil	1,000 Gallons	2012 4	41.026		5,661.588	\$104.436	\$ 2.55 8	83415			1	422.485	0.000	0.000
NE.	603 D	INL-S Buildings	LNG	Billion BTUs	2012 4	00000	00000 0		\$0,000	NA 8	83415			Ţ	0.000	0.000	0.000
E	603 D	INL-S Buildings	LPG	1,000 Gallons	2012 4	1.935		178.020	\$3.393	\$ 1.75 83415	3415			1	11.330	0.000	0.000
出	603 D	INL-S Buildings	Square Feet	1,000 Square Feet	2012 4	4,130.432	3,432			- 9	83415			NA	0.000	0.000	0.000
NE	603 D	INL-S Excluded	Electricity	Megawatt Hour	2012 4	4,274	4,274.100 14,5	14,583.229	\$220.505	\$ 0.05 8	83415			2	1,596.333	0.000	105.152
NE	603 D	INL-S Excluded	Square Feet	1,000 Square Feet	2012 4	145.584	584			. 3	83415			NA	0.000	0.000	0.000
田田	603 D	INL-S Vehicles and Equipment Diesel	Diesel	1,000 Gallons	2012 4	21.796		3,007.848	\$81,127	\$ 3.72 8	83415			T	224.455	0.000	0.000
出	603 B	INL-S Vehicles and Equipment	Gasoline	1,000 Gallons	2012 4	4.211		526.375	\$14.667	\$ 3.48 8	83415			1	37.311	0.000	0.000
NE	603 D	INL-S Vehicles and Equipment LPG	LPG	1,000 Gallons	2012 4	0.008	8 0.736		\$0.022	\$ 2.75 83415	3415			17	0.047	0.000	0.000
出	603 D	INL-S Water	Aquifer Replinish		2012 4	00000	0 #N/A		\$0.000	NA 8	83415				0.000	0.000	0.000
R	603 D	INL-S Water	Potable	Million Gallons	2012 4	249.662	562		\$0,000	. 69	83415			NA	0.000	0.000	0.000

## List of Operating On-Site Renewable Energy Systems

Source: Site/Lab

Site # PSO

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		2000	POF 0 1261 F 0 12121 F 0	1.1201							Green and updated with changes highlighted in blu	and updated with changes highlighted in blue.	reviewed ated in blue.	
uction	IS: Upda	ate the list o	internetius): EFACt 2003, DOE O430.1, E.O. 13423, E.O. 13314 actions: Update the list of currently operating on-site renewable or	Instituting: Er Act 2005, DOE O 4504, E.O. 13424, E.O. 13314  uctions: Update the list of currently operating on-site renewable energy systems and address SPO requests. For additional guidance see comments in row 9 of each column and Appendix C and I of the Site	requests. Fo	r additional	guidance see	comments in row 9 of each column	and Appendix	C and I of the Site	Orange Changes highlighted in blue.	fields that need to reviewed and up dated with hanges highlighted in blue.	ap dated with	
ainab.	ility Plar	in Guidance.	inability Plan Guidance. Purchased renewable energy should be listed in the "Purchase severation & BE Meseures" undedteet Edited and new data cells should be highlighted	iniability Plan Guidance. Purchased renewable energy should be listed in the "Purchased RE" worksheet. Newly proposed or potential on-site renewable energy systems should be listed in the secretion & PE Measures" under the partiel and new data cells changed be included.	orksheet. Ne	vly propose	d or potential	n-site renewable energy systems s	hould be listed	in the	Yellow Optional data field to be applicable and available.	Optional data field to be completed if applicable and available.	ed if	
ce: Si	ce: Site/Lab	memarat Tax	All data reviewed and is correct	All data reviewed and is correct for FY 2013 CEDR Report - Ernest Fossum 10/23/12	st Fossum 10	23/12					Red Calculated fields. No action required	. No action requi	ired	
					Ś	/stem Inf	System Information							
Ī							ı							
O.	Site #	O Site# Site	System Description/Name	Location Description (e.g., building name, etc.)	System Year Location Installed (Zip Code) (YYYY)	Year Installed (YYYY)	End Use Category	End Use Siting Status - On Federal or % of RECs Category Indian Land? Retained	% of RECs Retained	On or Off Grid?	Does the site own the T&D system that deliver the electricity?	Scope 1 or 2 System?	Generator Nameplate Capacity (MW)	Does the site own the Crope 1 or Off Grid? T&D system that delivers 2 System? Capacity (MW)
1	602 I	INL-I	Solar transpired wall	F 663, Records Storage Facility,	83415	2001	Goal Subject	Goal Subject On Federal Land, On User Site	100%	100% Non-Electric	No Electricity is Delivered (Scope 1	(Scope 1		Solar Thermal (including
5	603 I	INL-S	Solar transpired wall	MFC-774, ZPPR Support Wing,	83415	2010	Goal Subject	Goal Subject On Federal Land, On User Site	100%	100% Non-Electric	No Electricity is Delivered ( Scope 1	(Scope 1		Solar Thermal (including
177	603 I	INL-S	Solar transpired wall	MFC-682, MFC Machine Shop,	83415	2010	Goal Subject	Goal Subject On Federal Land, On User Site	100%	100% Non-Electric	No Electricity is Delivered ( Scope 1	(Scope 1		Solar Thermal (including

Produ	Production/Consumption Information	Information			Cost		Biomas	Biomass Fuel Information	П		Notes	
Estimated Annual Renewable Electricity Output (MWh/Yr)	Estimated Annual Renewable Electricity Consumed (MWh/Yr)	Estimated Annual GHG Emissions Avoided (MtCO <sub>2</sub> e/Yr)		Estimated Annual Renewable Thermal Consumed (10^6 BTU/Yr)	Implementation Cost (\$)	Principal Biomass Fuel Type	Principal Biomass Fuel Use (10^6 BTU/Yr)	Secondary/Blend Fuel Type	Secondary/Blend Fuel Use (10^6 BTU/Yr)	Fuel Costs (\$)	Estimated Annual Renewable Thermal Annual Renewable Thermal Indication Consumed (10.0 Consumed (10.0 Fuel Use (	SPO Notes
water and space conditi-	0.000	00000	102.400	102.400								
water and space conditi-	00000	0000	259.800	259.800								
water and space conditi-	00000	0000	239.900	239.900								

### List of Purchased Renewable Energy

Requirement(S): FPAct 2005, DOE 0-456.1, E. 0. 13514
Instructions: Update the list of purchased tracewable energy resources and address SPO requests. For additional guidance see comments in row 9 of each column and Appendix C and I of the Site Sustainability Plan Guidance. On-site operational renewable energy should be listed in the "Operating On-Site Renewables" worksheet. Edited and new data cells should be highlighted.

Source: Site/Lab

All data reviewed, updated, and is correct for FY 2013 CEDR Report - Ernest Fossum 10/23/12

				Pur	Purchase Information	rmation					Const	Consumption Information	tion	Cost		Notes	
PSO	Site#	* Site	Type of Renewable Energy Purchased	System Type/Category	Source Location (Zip Code)	Service Purchase Year Year (XYYY) (FY)	-	End Use F	Purchase Term Si	Siting Status - On Federal or Indian Land?	Fotal Renewable I Electricity Purchased (MWh/Xr)	Total Renewable         Extinated Annual         Total Renewable           Electricity         GHG Emissions         Thermal           Purchased         Avoided         Purchased (10°6           (MWh/Yr)         (MiCO <sub>2</sub> eXr)         BTU/Xr)		Annual Cost (S)	\$/Unit	Additional Information	SPO Notes
NE	603	INL-S	INL-S Renewable Energy Credits Wood and wood residu 31323	700d and wood residu 3	31323	20	2007 Go	oal Subject Sh	Goal Subject Short-Term (≤10)		6,800.000	5,262.486		\$ 19,924.00 \$ 2.93	\$ 2.93		
NE	603	INL-S	INL-S Renewable Energy Credits Wind		76951	37	2008 Gr	oal Subject Sh	Goal Subject Short-Term (< 10)		6,600.000	3,356.081		\$ 18,678.00 \$ 2.83	\$ 2.83		
NE	603	INL-S	Renewable Energy Credits Other		83415	37	2009 Gr	oal Subject Sh	Goal Subject Short-Term (< 10)		6,920.000	4,207.582		\$ 6,920.00 \$ 1.00	\$ 1.00		
NE	603	INL-S	Renewable Energy Credits Wind		83415	20	2010 Gr	oal Subject Sh	Goal Subject Short-Term (≤ 10)		15,915.520	9,677.147		\$ 16,393.00 \$ 1.03	\$ 1.03		
NE	603	INL-S	INL-S Renewable Energy Credits Wind	No. 140	58579	20	2011 Go	oal Subject Sh	Goal Subject Short-Term (≤ 10)		16,900.000	16,311.281		\$ 14,365.00 \$ 0.85	\$ 0.85		
E E	603	INL-S	Renewable Energy Credits Wind		8341.5	72	2012 Go	oal Subject Sh	Goal Subject Short-Term (≤ 10)		22,000.000	14,082.244		\$ 22,000.00	FC 7.2 S 1.00 ge Ide	Por FY 2012 - Increased purchase from 22,000,00 \$ 1.00 75% to 10% and purchased locally generated free power RECs from Idaho Palls Power	

## Conservation and Renewable Energy Measures List

Economical SIRA 2007, DOE O 436.1
Instruction: To plant the transmission of conservations and renewable energy measures/projects and address SPO requests. For additional guidance see comments in row 10/11 of each column and Appendix C of the Site Sushimbility Plan Guidance. Edited and new actions a see the plantiques of conservations and renewable energy measures/projects and address SPO requests. For additional section 432, Inne ampired reporting.

Sources StarLab June 2012 EISA See 432 report

All data reviewed, updated, and its correct for FY 2013 CEDR Report. Ernest Forsam 11/14/12

							Measure/Project	ject Description						Func	Funding Overview	
(a)	(p)	(0)	(g)	(e)	0)	(2)	(h)	0)	0	(k)	0	(m)	(n)	(0)	(0)	(b)
PSO	Site #	Site	HQ Measure #	If Covered, EISA S432 Reporting Year (YYYY)	Has this measure been included in an official DOE budget requests? If yes, provide Project/Measure#	Site Project #	Conservation Measure(s) Status	Conservation Measure(9) Type	Meta Loc Conservation Messure(s) Name or Description (2.p)	Measure(s) I Location my (Zip Code) siny	Is this a multiple or co	Does the measure contribute to the reduction of deferred maintenance?	Is this effort/measure beyond typical O&M improvement to meet a goal?	Funding SourceType (Actual or Potential)	Starting Year of Measure Implementation (Anticipated or Actual - YYYY)	Completion/ Operational Year of Measure (Anticpated or Actual - VVVV
NE	603 IN	INL-S NE-	NE-0603-0005	2012		ECM-001	Operational	Lighting Improvements	INL ESPC Project #2 MFC - Lighting Improvements		Y	Yes 1	Yes	ESPC	2009	2010
NE	603 IN	INL-S NE-	NE-0603-0006	2012		ECM-002	Operational	Boiler Plant Improvement	INL ESPC Project #2 MFC - Boiler Plant Improvements		Z	Yes 1	Yes	ESPC	2009	2011
NE	603 IN	INL-S NE-(	NE-0603-0007	2012		ECM-003	Operational	Energy Related Process Improvements	INL ESPC Project #2 MFC - Compressed Air Improvements		Y	Yes Y	Yes	ESPC	2009	2011
NE	603 IN	INL-S NE-	NE-0603-0008	2012		ECM-004	Operational	Energy Related Process Improvements	INL ESPC Project #2 MFC - Digital EMS Controls		Z	No 1	Yes	ESPC	2009	2011
NE	603 IN	INL-S NE-	NE-0603-0009	2012		ECM-005	Operational	Solar Thermal (including water and space conditioning)	INL ESPC Project #2 MFC - Solar Thermal Transired Walls (2)		Z	No	Yes	ESPC	2009	2011
NE	603 IN	INL-S NE-	NE-0603-0016	2012	-0.	BEA	Operational	Advanced Metering System	Metering for HPSB Candidates	Mu	Multiple N	No Y	Yes	M&R Direct	2011	2011
NE	603 IN	INL-S NE-	NE-0603-0002-A	2012		BEA	Operational	Water & Sewer Conservation Systems	Water Leak Repairs - ATR Complex		Y	Yes	No	M&R Direct	2009	2009
NE	603 IN	INL-S EM-	EM-0603-0013	2012		CWI	Operational	Water & Sewer Conservation Systems	INTEC CPP-606 Water and Sewer Conservation Systems		H	Yes	Yes	Other	2010	2010
NE	602 IN	INL-I NE-	NE-0602-0012	2012	No	SIF FY-12#1	Operational	Other	INL Applied R&D for Project Development / Sustainability	Mu	Multiple N	No	Yes	M&R Indirect	2012	2012
NE	602 IN	INL-I NE-	NE-0602-0013	2012	No 8	SIF FY-12 #2	Operational	Chiller Plant Improvement	ML WCB Chiller Replacements	Mu	Multiple Y	Yes 1	Yes	M&R Indirect	2012	2012
NE	602 IN	INL-I NE-	NE-0602-0014	2012	No	SIF FY-12#3	Operational	Heating, Ventilating, and Air Conditioning (HVAC)	INL EROB CO2 Controls	Sin	Single N	No Y	Yes	M&R Indirect	2012	2012
NE	602 IN	INL-I NE-	NE-0602-0015	2012	No	SIF FY -12 #4	Verified	Water & Sewer Conservation Systems	INL WCB Water Fixture Replacements	Sin	Single No		No	M&R Indirect	2013	2013
NE	602 IN	INL-I NE-	NE-0602-0016	2012	No	SIF FY-12 #5	Operational	Water & Sewer Conservation Systems	INL IRC (IF-602) Water Fixture Replacements	Sin	Single N	No b	No	M&R Indirect	2012	2012
NE	602 IN	INI'-I NE	NE-0602-0017	2012	No S	SIF FY-12 #6	Operational	Lighting Improvements	INL WCB Light Fixtures	Mu	Multiple N	No B	No	M&R Indirect	2012	2012
NE	602 IN	INI-I NE-	NE-0602-0018	2012	No	SIF FY -12 #7	Verified	Lighting Improvements	DAL WCB Lighting Controls	Mu	Multiple N	No	Yes	M&R Indirect	2013	2013
NE	602 IN	INI-I NE-	NE-0602-0019	2012	No 8	SIF FY-12 #8	Verified	Lighting Improvements	INL WCB External Lighting	Mu	Multiple N	No B	No	M&R Indirect	2013	2013
NE	602 IN	INL-I NE-	NE-0602-0020	2012	No	SIF FY-12 #9	Operational	Lighting Improvements	INL IF-601 External Lighting	Sin	Single N	No Þ	No	M&R Indirect	2012	2012
NE	602 IN	INL-I NE-	NE-0602-0021	2012	No	SIF FY-12#10	Verified	Electric Motors & Drives	INL IRC Motors/Controls	Sin	Single Y	Yes	Yes	M&R Indirect	2013	2013
NE	603 IN	INL-S NE-	NE-0603-0014	2012		BEA	Cancelled	Other	INL ESPC Project #3 CFA, ATR Complex and SMC	Mu	Multiple Y	Yes	Yes	ESPC	N/A	2015
NE	603 IN	INL-S NE-	NE-0603-0017	2012	No	BEA	Verified	Energy Related Process Improvements	ATR Back-Up Generator Set Replacement		Y	Yes	Yes	ESPC	2013	2015
NE	603 IN	INL-S EM-	EM-0603-0012	2012	104	CWI	Operational	Heating, Ventilating, and Air Conditioning (HVAC)	INTEC CPP-663 2nd Floor HVAC Upgrade		Y	Yes		Other	2011	2011
EM	603 IN	INL-S NE-	NE-0603-0018	2012	No	AMWIP	Identified	Other	All Process Buildings at RWMC (AMWTP) Shutdown		z	No	No	Disposition	2018	2018
EM	603 IN	INL-S NE-	NE-0603-0019	2012	No (	cwī	Identified	Other	All Process Buildings at RWMC (CWI) Shutdown		z	No N	No	Disposition	2018	2018
EM	603 IN	INL-S NE-	NE-0603-0020	2012	No	CWI	Identified	Other	CPP-659 New Waste Calcine Facility/Process Shutdown		Z	No	No	Disposition	2014	2016
NE	602 IN	INL-I NE-	NE-0602-0022	2012	No	BEA	Identified	Building Automation Systems/EMCS	BAS System Installation and Programming	Sin	Single N	No Y	Yes	M&R Indirect	2013	2013

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Н	Φ	(n)	(v)	(w)	(X)	(3)	(z)	(aa)	(ab)	(ac)	(ad)	(ae)	(af)	(ag)	(ah)	(ai)	(aj)	(ak)	(a))
An		If M&V:	If M&V has been conducted, provide type and		Is this a energy Provide estimated energy saved saving	energy saved or sv	or switched for each energy type, as applicable. If there are no savings associated with the measure enter "O". estimated savings are unknown at this time enter "TBD".	rgy type, as applical ings are unknown a	for each energy type, as applicable. If there are no saviir estimated savings are unknown at this time enter "TBD"	avings associated v 3D".	vith the measure er	nter "0". If	-	Estimated Annual ILA	Estimated Annual	_	Estimated	71	Estimated Annual Cost Savings
Estmated to r	to measure and verify the performance of this measure?	Type of M&V	MM YYYY		Estimated Annual Electricity Saved (MWh/Yr)	Estimated Annual Fuel Oil Saved (10^3 Gal/Yr)	Estimated Annual Natural Gas Saved (10^3 Cf/Yr)	Estimated Annual LPG/Propane Saved (10^3 Gal/Yr)	Estimated Annual Coal Saved (Short Ton/Xr)	Estimated Annual Steam Saved (10^9 BTU/Yr)	Estimated Annual Other Saved (10^9 BTU/Yr)	If "Other", Po what is "Other"? (1	Annual Potable Water Savings (10^3 Gal/Yr) (10	a - C	a v c	Annual Renewable Thermal Output (10^9 BTU/Yr)	Annual Energy Cost Savings (\$/Yr)	Annual Water Cost Savings r (\$/Yr)	(\$/Yr) from switching to a renewable energy source
1,874,000		1		Energy Saving E	666.837	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0000	\$ 42,839	69	
22,199,000				Energy Saving E	(13,103.130)	580.266	0.000	0.000	0.000	0.000	0:000		3,479.000	0.000	00000	0.000	\$ 1,480,896	\$ 1,278	
1,230,000				Energy Saving E	289.952	0.000	00000	0.000	0.000	0.000	0.000		0.000	00000	00000	0.000	\$ 8,791	69	
7,521,000				Energy Saving E	3,832.427	0.000	0.000	0.000	0.000	0.000	00000		0.000	0.000	0.000	0.000	\$ 119,551	., 69	
757,000				Fuel Switching E	(1.057)	3.595	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.503		69	12,310
200,000				Energy Saving E	971.400	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	\$ 34,000	- 59	
164,881				Energy Saving E	103.585	0.000	00000	0.000	0.000	0000	0.000		4,562.500	0.000	0.000	0.000	3,904	N/A	
325,434				Energy Saving E	1,228.019	0.000	0.000	0.000	0.000	0.000	0.000		139,000.000	0.000	0.000	0.000	\$ 61,412	69	
250,000				Energy Saving E	000.0	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	00000	69	69	
312,000				Energy Saving E	TBD	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0000	TBD	· 69	
34,000				Energy Saving E	37.100	0.000	2,901.500	0.000	0.000	0.000	0:000		0.000	0.000	0.000	0.000	\$ 28,000	69	
164,900				Water Saving EC	0.000	0.000	0.000	0.000	0.000	0.000	0.000		1,579.000	0.000	0.000	00000	· · · · · · · · · · · · · · · · · · ·	\$ 2,900	
54,100				Water Saving EC	00000	0.000	0.000	00000	0.000	0.000	0.000		347.000	0.000	0.000	00000	· •	\$ 700	
118,000				Energy Saving E	090'86	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	000'5 \$	- \$	
24,300				Energy Saving E	174.080	0.000	0.000	0.000	0.000	0.000	00000		0.000	0.000	0.000	0.000	8,800	., <del>60</del>	
74,100				Energy Saving E	72.230	0.000	0.000	0.000	0.000	0.000	0.000		0.000	00000	0.000	0.000	3,600	69	
12,200				Energy Saving E	1.541	0.000	0.000	0.000	0.000	0.000	00000		0.000	0.000	0.000	0.000	\$ 100	69	
191,400				Energy Saving E	78.520	0.000	00000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	3,600		
15,000,000				Energy Saving E	0.000	0.000	0.000	0.000	0.000	0.000	0.000		N/A	N/A	0.000	0.000	\$ 1,000,000	N/A	
750,000				Energy Saving E	00000	30.000	0.000	00000	0.000	0.000	000'0		0.000	0.000	0.000	0000	000'06 \$	· <del>69</del>	
25 d Project - All work complete	mplete			Energy Saving E	00000	0.000	0.000	0.000	0.000	0.000	00000		N/A	N/A	0.000	0.000	N/A	N/A	
				Energy Saving E	22,000.000	0.000	00000	206.000	0.000	0.00	0.000		7,110.000	0.000	0.000	0.000	\$ 806,500	\$ 5,000	
				Energy Saving E	11,000.000	0.000	00000	0000	0.000	0000	0.000		0.000	0.000	0.000	0.000	\$ 403,250	€ <del>9</del>	
				Energy Saving E	TBD	TBD	00000	00000	0.000	0.000	000:0		TBD	0.000	0.000	0.000	TBD	TBD	
20,000				Energy Saving E	182,020	00000	00000	00000	0.000	0.000	0.000		0.000	0000	0000	0000	12 610	64	

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		Notes	
(am)	(an)	(ae)	(ap)
Estimated Annual Ancillary Cost Savings (\$Yr)	Site Priority	A dditional Information	SPO Comments/Notes
\$ 13,974		Complete Construction Camplete	
\$ 29,994		Complete Construction Complete	
\$ 9,071	Complete	Construction Complete	
69	Complete	Complete Construction Complete	
69	Complete	Complete Construction Complete Update: The original amount input was for fuel oil in Mbtu. 3,595 gallons is correct - EF	SPO Note. Verify Estimated Annual Fuel Oil Saved.
69	Complete	Construction Complete	
69	Complete	Complete Construction Complete - All identified water leaks at the DL ATR Complex have been repaired in conjunction with other program project work scope.	
N/A	Complete	Complete Construction Complete	
69	Complete	Complete RAD Complete	
69	Complete	Construction Complete	Ĭ
69	Complete	Construction Complete	
69	2	Stategic Investment Funding - Internal (Design) Update: This ECM was postponed to 2013 due to insufficient funds to complete in 2012 - EF	
69	Complete	Construction Complete	Ĭ
69	Complete	Complete Construction Complete	
69	2	Stategic Investment Funding - Internal (Design) Update: This EOM was postponed to 2013 due to insufficient funds to complete in 2012 - EF	
69	2	Stategic Investment Funding - Internal (Design) Update: This EOM was postponed to 2013 due to insufficient funds to complete in 2012 - EF	
69	Complete	Complete Construction Complete	
69	2	Stategic Investment Punding - Internal (Design) Update: This EOM was postponed to 2013 due to insufficient funds to complete in 2012 - EF	
N/A		Performing Investment Grade Audit	
69		Potential ESPC ECM to install the purchased generators only	
N/A	Complete	EM Program. Update: This was a DOE EM Direct funded project. All work has been completed - EF	SPO Note. Completion year on or before 2011, please verifylipdale conservation measure stalus; Completion year on or before 2011, please verifylipdale conservation measure stalus
€9		AMWIP mission complete, all buildings shudown with no energy or water use conceptual and costs and a timeline for implementation have not been developed per Ken Whitham - RK	
69		CWI mission complete, all buildings shudown with no energy use, conceptual and costs and a timeline for implementation have not been developed per Ken Whitham - RK	
69		INTEC New Waste Calcine Facility mission complete, CPP-659 shut down with no energy or water use	
69	3	Stratego Investment Funding - Internal (2013)	

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3	Completion/ Operational Year of Measure (Antichated or	2013	2013	2014	2015	2014	2015	2015	2015	2018	2018	2015	2017	2015	MA	2013	2010
walked Salaries	rear of tration ted or YYYY)	2013	2013	2014	2015	2013	2013	2013	2013	2017	2017	2014	2015	2012	M/A.	2012	2009
	Funding SourceType (Actual or Potential)	M&R Indirect	M&R Indirect	M&R Indirect	M&R Indirect	ESPC	Other	Other	Other	Line Item	GPP	M&R Direct	M&R Direct	M&R Direct	ESPC	UESC	UESC
3	Is effort beyon O impro	Yes	Yes	Yes	Yes					Yes	Yes	Yes	Yes	Yes			
(m)	Dc me contril redu de de main	No	No	No	No	No	Y	No		Yes	No	Yes	Yes	No	Yes	Yes	No
e	Us this a multiple or ingle facility ECM?	Single				Multiple						Single	Multiple	Multiple	Multiple		
9	S # 69	EQ.				A							A	A	ď		
89	Onservation Measure(s) Name or Description	BAS System Upgrade and Programming	Energy and Water Upgrades - Various Facilities (FY 2013)	Energy and Water Upgrades - Various Facilities (FY-2014)	Energy and Water Upgrades - Various Facilities (FY 2015)	INL. Stewide Electric and Water Meter Installations	Water Leak Repairs - CFA	INL On-Site Wind Farm Devel goment - Site Devel goment, Electrical Infrastructure, and NEPA Documentation only	INL On-Site Solar Array Development and Installation.	ATR Back-Up Generator Set Elimination - Commercial Power	ATR Complex Sewer Lagoon Resizing	Replace Central Boiler with Distributed Steam and Heating Systems	End Operations of Liquid Waste Management System - INTEC	Install Energy and Water Metering - INTEC	INL ESPC Project #4 INTEC and RWMC	Idaho Falls Facilities UESC Project: Energy and Water	Idaho Falls Facilities UESC Project - Proposal Development Energy Surrous
e indicate particular	Conservation	Building Automation Systems/EMCS	Heating, Ventilating, and Air Conditioning (HVAC)	Heating, Ventilating, and Air Conditioning (HVAC)	Heating, Ventilating, and Air Conditioning (HVAC)	Standard Metering Systems	Water & Sewer Conservation Systems	Wind	Solar Photovoltaic	Energy Related Process Improvements	Water & Sewer Conservation Systems	Boiler Plant Improvement.	Water & Sewer Conservation Systems	Advanced Metering System	Other	Heating, Ventilating, and Air Conditioning (HVAC)	Other
(d)	Conservation Measure(s) Status	Identified	Identified	Identified	Identified	Identified	Identified	Identified	Identified	Identified	Identified	Identified	Identified	Identified	Cancelled	Identified	Operational
3	Site Project #	BEA	BEA	BEA	BEA	BEA	BEA	BEA	BEA	BEA	BEA	cwi	cwī	cwi	cwi	BEA and CWI	BEA and CWI
9	Has this measure been included in an official DOE budget requests? If yes, provide Project/Measure #	No	No	No	No	vedil	***		10 TO	No	No	No	No	No O		-555	
9	(e) If Covered, EISA S432 Reporting Year (YYYY)	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012
9	# # sure	NE-0602-0023	NE-0603-0021	NE-0602-0024	NE-0603-0022	NE-0603-0001	NE-0603-0002-B	NE-0603-0003	NE-0603-0004	NE-0603-0023	NE-0603-0024	NE.0603-0025	NE-0603-0026	NE-0603-0027	EM-0603-0015	NE-0602-0011	NE-0602-0010
(3)		INL	INL-S	INL-I	INL-S 1	INTS	INL-S	INL-S	INI-S	INI-S	INL-S	INL-S	INIS	INL-S	INI-S	INL-I	INL
8	ν.	209	603	209	603	603	603	603	603	603	603	603	603	603	603	209	209
9	PSO PSO	RE	NE	NE	NE	NE	NE	Ä	NE	NE	NE	EM	EM	EM	NE	NE	NE

Cost Savings	(al)	Estimated Annual Cost Savings	(\$\text{Xr}) from switching to a renewable energy source											S					
Cost	(ak)	Estimated	tt.	1	750	750	750	N/A	N/A	N/A	N/A	E	26,000	1	TBD	2,800	N/A	4,733	
ľ	(aj)		Annual Energy Cost Savings (\$/Yr)	\$ 080'\$	100,000 \$	100,000 \$	100,000 \$	85,901	6,370	Ē	ii.	\$ 000,000	69	1,020,000 \$	TBD	27,035 \$	200,000	475,581 \$	
	(ai)	Estimated E	e hput Yr)	0.000	\$ 0000	\$ 00000	0.000	\$ 00000	\$ 000.0	MA \$	N/A \$	\$ 000.0	\$ 000'0	\$ 000:0	0.000	\$ 00000	\$ 000.0	\$ 000.0	
	(ab)		Renewable R Electricity The Output (10'	0.000	0.000	0.000	0.000	0.000	0.000	52,560.000	1,051.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
ł	(ag)	Estimated E	(Non-Potable R Freshwater) E Savings (10^3 Gal/Yr) (A	0.000	0.000	0.000	0.000	N/A	0000	N/A	N/A	0.000	0.000	0.000	0.000	0.000	N/A	0.000	
100	(af)	Estimated A	ter (r)	0.000	1,000.000	1,000.000	1,000.000	N/A	7,482.500	N/A	N/A	0.000	38,000.000	0.000	56,000.000	4,000.000	N/A	5,259.000	
	(ae)	nter "0". If	If "Other", P																
utput	(ad)	h the measure e	Estimated Annual Other Saved (10~9 BTU/Xr)	0.000	00000	0.000	0.000	0.000	00000	00000	00000	0.000	0.000	00000	00000	0000	0.000	0.000	
able Energy O	(ac)	gs associated wit	Estimated Annual Steam Au Saved (10^9 BTUXr) (10	0.000	00000	0.000	0.000	0000	0000	00000	0000	0.000	0.000	00000	0.000	00000	0.000	0.000	
Source Savings/Renewable Energy Output	(ab)	here are no savin ime enter "TBD"	Estimated Annual An CoalSaved Si (Short Ton/Yr)	0.000	0.000	0.000	0.000	0.000	0.000	00000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Source S	(aa)	as applicable. If i unknown at this t	Estimated Annual LPG/Propane Saved (10*3 Gal/Yr) (Sho	0.000	20.000	0.000	20:000	0.000	0000	00000	00000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
ł	(2)	Is this a energy Provide estimated energy saved or switched for each energy type, as applicabe. If there are no savings associated with the measure enter "O".  saving	Estimated Annual LPG/ Natural Gas Saved S (10^3 Cf/Yr) (10^3	0.000	0.000	1,000.000	0.000	000.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9,446.704	
	Ö	l or switched for esti	nnual Estimates wed Natural C Yr) (10^3.	0.000	20.000	0.000	50.000	0.000	0.000	0.000	0.000	300.000	0.000	300.000	0.000	0.000	0.000	0.000	
	(X)	ed energy save	Estimated Annual Fuel Oil Saved (10^3 Gal/Yr)	. 9		0:		2	υ.	o	0		9		۵		Q	8	
ı	(x)	Provide estimat	Estimated Annual Electricity Saved (MWh/Xr)	101.460	1,000.000	1,000.000	1,000.000	2,603.077	169.007	52,560.000	1,051.200	00000	00000	0.000	TBD	750.900	0.000	7,318.783	
	(w)	Is this a energy saving	measure or renewable energy system?	Energy Saving E	Fuel Switching I	Fuel Switching I	Energy Saving E	Water Saving E(	Energy Saving E										
rification	(v)	Are there plans conducted, provide type and	MM YYYY																
Measurement & Verification	(n)	If M&\ conducted, pi	Type of M&V																
Measur	Φ	Are there plans			-		_	_		_	_		_					_	
	(8)	Perfector	Implementation Cost (\$)	\$ 5,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,240,000	\$ 269,016	\$ 2,500,000	\$ 9,000,000	\$ 60,000,000	\$ 1,100,000	TBD	TBD	TBD	N/A	\$ 2,100,000	
	(r)	Definition		25 \$	25 \$	25 \$	25 \$	25 \$	25 \$	\$ 52	25 \$	30 \$	25 \$	30	25	52	25	25 \$	

		Notes	
(am)	(an)	(op)	(ap)
Estimated Annual Ancillary Cost Savings (\$\mathcal{S}\Tr)	Site t Priority	A ddibonal Information	SPO Comments/Notes
69	3	Strakego Investment Funding - Internal (2013)	
69	1	Strategic free estment Funding - Internal (2013) Projects to be developed in FY 2012.	
69	4	. Strategic Investment Funding - Internal (2014) Projects to be developed in FY 2013.	
69	Ś	Strategic Investment Funding - Internal (2015) Projects to be developed in FT 2014.	
69	en.	. INL Metering Plan develop et - No funding identified. Will include in ESPC if project funding is not available	
69	10	Bore holes falled to posterely identify leaks. Purther investigation is necessary to purpoint the leaks as identified by the Leak Stady for repair.  © Update: This work has been postported and may be compiled by ESPC #3. The estimated completion year has been modified to coincide with the ESPC project compiled on in PY 2015 - EF	SPO Nide. Completion year on or before 2011, please verifying date conservation measure sitius; Completion year on or before 2011, please verifying the conservation measure sitius
69		Jointhed Opportunity - Project Word Scope has been dereloped and infrastructure surport work may begin if fanding is made available. Update: This project will be reduced in suce and worked as part of ESPC #3. Final project size is not yet determined. The assumption is that RE generated is also energy savel - EF	SPO Request. Changed the "Estimated Annual Electricity Saved" value to the "Estimated Annula RE consumed" value provided. Please review and updated confirm.
69		Update. This project will be reduced in size and yet deemined. The assumption is that EE generated is also energy saved - EF	SPO Note. Charged the "Estimated Aumai Electricity Saved" value to the "Estimated Aumais RE consumed" value provided; Completion year on or before 2011, please verifyupdate conservation measure status.
69		Line Demproject to eliminate the need to rat the generators whenever the Reador is operating. Final solution to significant operational issue	
69		Current sewage lagoon is significantly oversized, project to evahaute, design, and ocnstruct a resizing dike in lagoon.	
69		Project Concept Meetined, Funding Source Not Defermined conceptual and costs and a transfer for mplementation have not been developed per Ken Whitham - RK	
169		Project Concept Identified, Funding Source Not Defermined conceptual and costs and a tradine for implementation have not been developed per Ken Whitham - RK	
69		Project Concept Identified, Fanding Source Not Defermined conceptual and costs and a timeline for implementation have not been developed per Ken Whitham - RK	
NiA		ESPC Project Development on hold: EM Program. Update: ESPC project cancelled - Roger Jones - EF	
NA		Final project still being developedrefined. Update A portion of this project will be worked by CWI to upgrade several Idaho Falls facilise - EF	
69		Survey Only - No Project.  **Update.** This survey is complete and EOMs are being developed into Strategic Investment Funded projects for internal INL funding - EF*	Update. This survey is complete and ECMs are being developed into Strategic investment Ended SEO Note: Completion year on or before 2011, please verifying the conservation measure status. Completion year on or before 2011, please verifying conservation measure status.

# Building Inventory Changes, HPSB Compliance and Projected Utilities Consumption

Requirement(s): EPAct 2005, EISA 2007, DOE O 436.1

Instructions: Update this worksheet with information on new building construction, major renovation, replacements, and buildings that are to be disposed of in the near future, and address SPO requests. For additional guidance see comments in row 9 of each column and Appendix C of the Site Sustainability Plan

Source; SiciLab

All data reviewed, updated, and is correct for FY 2013 CEDR Report - Ernest Possum 11/14/12

	ed ILA from from from from fr) Intensity?						
Basic Information	Anticipated I Water Usage ( Gal/Yr)	Q	Q	0	Q	Q	Q
	Anticipated Potable Anticipated II.A Water Usage (10^3 Gal/Yr) Gal/Yr)	TBD	TBD	TBD	TBD	TBD	TBD
	dicipated Natural Estimated Amual Gas Usage (10°3 GHG Emissions Cubic Feet/Yr) Avoided (MtCO <sub>2</sub> e/Yr)	TBD	TBD	TBD	TBD	TBD	TBD
	Anticipated Natural Estimated Annual Anticipated Potable Anticipated ILA Gas Usage (10°3 GHC Emissions Water Usage (10°3 Water Usage (10°3 Cubic Feel/Yr) Avoided (MICO <sub>2</sub> e/Yr) Gal/Yr)	TBD	TBD	0	0	0	0
	Anticipated Electricity Usage (RWh/Yr)	TBD	TBD	TBD	TBD	TBD	TBD
	Facility Change Status	New	New	Replacement	New	New	New
	Total Project Number/Type of Cost (\$ M)						
	Total Project Cost (\$ M)	\$22.0	\$50.0	\$6.8	\$10.0	\$12.0	\$10.3
	Current CD Status	Complete	Complete	Complete	Complete	Complete	Complete
	Planned or Actual CD-2 Date (MM/YY)	N/A	N/A	N/A	N/A	N/A	N/A
	Location (Zip Code)		83415	83415	83415	83415	
	Building/Project Name (Zip Code)	Energy Systems Laboratory 83415 (ESL)	Research and Education Facility	MFC Dial Room 8	Irridated Materials Caracterization Lab (IMCL)	MFC Technical Support 8 Building	ATR Complex Dial Room 83415
	Project ID	Lease	Lease				
	Site		INI-i	NL-S	INL-S	NL-S	NL-S
	Site #	602 INL-I	602	603	603	603	603
	PSO	閔	图	图	Ħ	图	图

		SPO Comments/Notes	SPO Request: Please review and update facility change status	SPO Request: Please review and update facility change status				
NSO;  Creen and updated with changes ingihighted in blue.  Green and updated with changes ingihighted in blue.  Counge Fledd is that need to reviewed and updated with changes ingihighted in blue.  Politonal data find to be completed, if applicated and available mypticated and available to the change of the property o		Additional Information SP	Pacility is complete and occupied. LEED certification is pending. Facility Change Status is New. facility	SPQ Under Construction. Facility Change Status is New. rev faci	Facility is complete and occupied.	Facility is complete and occupied. LEED certification is pending.	The MFC Technical Support Facility is currently in an inactive status and will likely be cancelled.	
	Complete this section if construction has been completed	In terms of energy use, percentage below ANSI/ASHRAE/IESNA Standard 90.1 achieved	Ŧ.	1	I	F	T.	
	Complete this section if new building project was construction has been CD-1 or lower on 10/1/06 completed	Estimated If not at least 30% below ASHRAE Percentage below Std 90.1, will design achieve ASHRAE Std 90.1 in maximum leved for energy efficiency terms of energy use that is life-cycle cost-effective?	Yes	Yes	Yes	Yes	Yes	Yes
	Complete this section CD-1 o	Estimated percentage below ASHRAE Std 90.1 in terms of energy use	Planning for 30%	Planning for 30%	Not Applicable	Planning for 30%	Planning for 30%	Not Applicable
	For compliance with DOE O 436.1	What GP equivalency will the building achieve?	LEED® Gold	LEED® Gold	Not Applicable	LEED® Gold	LEED® Gold	Not Applicable
Guidance. Edited and new data cells should be highlighted.	For compliance with Sec 438 of EISA	Anticipated If > 5,000 sq ft, will it Square maintain or restore pre- Footage development hydrology?						
nd new data cell		Anticipated Square Footage	91,000 Yes	148,000 Yes	1,856 Yes	12,000 Yes	17,000 Yes	1,800 Yes
Guidance. Edited an		Expected Building Occupancy or Removal Year (YYYY)	2012	2013	2012	2012	TBD	2015

FY 2013 CEDR. Master\_File\_Final\_12-5-12 XLSX: 3.4 Bidg Invertory Changes 12/5/20126:44 PM

### Source Energy Savings Credit

Requirement(s): E.O. 13123

<u>Instructions</u>: Optional, complete the tables below for projects that increase site energy use but save source energy. For additional guidance see: http://www.eere.energy.gov/femp/pdfs/sec502e\_%20guidance.pdf. Edited and new data cells should be highlighted.

Source: Site/Lab

### **EPACT Goal Subject Buildings**

Name of Project Saving Source Energy in FY 2011 (insert additional rows as	Annual Site Energy Increase with the Project	Annual Source Energy Saved with the Project	Adjustment to Annual Site Energy
necessary)	(10^6 BTU/Yr)	(10^6 BTU/Yr)	(10^6 BTU/Yr)
Project No. 1	0.0	0.0	0.0
Project No. 2	0.0	0.0	0.0
Project No. 3	0.0	0.0	0.0
Totals	0.0	0.0	0.0

### **EPACT Excluded Buildings**

Name of Project Saving Source Energy in FY 2011 (insert additional rows as	Annual Site Energy Increase with the Project	Annual Source Energy Saved with the Project	Adjustment to Annual Site Energy
necessary)	(10^6 BTU/Yr)	(10^6 BTU/Yr)	(10^6 BTU/Yr)
Project No. 1	0.0	0.0	0.0
Project No. 2	0.0	0.0	0.0
Project No. 3	0.0	0.0	0.0
Totals	0.0	0.0	0.0

### Data Centers

Requirement(s): EISA 2007, DOE O 436.1

Instructions: Update the list of data centers and complete all fields, if not using DOEGRIT. For additional guidance see comments in row 9 of each column and Appendix C of the Site Sustainability Plan Guidance.

Source: SiteLab All data reviewed, updated, and is correct for FY 2013 CEDR Report - Ernest Fossum 11/20/12

		Gross Floor Area (Sq.Ft.)	1,800	1,284	3,700	812	48
		Country	SA	SA	SA	SA	SA
		Zip Code	83415 USA	83415 USA	83415 USA	83415 USA	83415 USA
		State	П	П	П	П	ID
		City	Idaho Falls	Idaho Falls	Idaho Falls	Idaho Falls	Idaho Falls
	4	Street Address 2					
Basic Information		Street Address	1155 Foote Drive	1155 Foote Drive	2525 Fremont Avenue	1155 Foote Drive	Scoville, ID
Bas		Phase of Closure					
		Target Date for Closure (CY) (If Scheduled)					
		Data Center POC	Tina Chapman	Tina Chapman	Jeff Staffon	Bob Bell	Bill Bowman
		Assigned DCEP POC Data Center POC Closure (CY) (If Scheduled)					
		Data Center Function	General	General	General	General	General
		GOCO / Data Center Name FED	GOCO IF-608 - Business Sys General	GOCO IF-608 - External Ho: General		GOCO IF-608 - Room B5 CV General	GOCO RWMC-658
		GOCO /	GOCO	GOCO .	GOCO IF-654	GOCO	GOCO
		Site	INI-I	INI-I	INI-I	INI-I	INL-S
		Site#	602 INI	602 INI	602 INI	502 IN.	603 INI
		PSO	出	田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田	图	EM	EM

		O O	apparedote and available.															
		Pod	Pod Calculated fields No action remired	ired														
							IT Faci	IT Facilities, Energy								Ph Ph	Physical Servers	ers
															l	l		
Facility Cost (\$\\$Sq.Ft\$	Facility Cost Included in (\$\script{S}\sq.Ft}. Cost? (V/N)	Ownership Type	Electricity   Total Data Center   Average Data   Total Data   Average II	Electricity Metered (Y/N)	Total Data Center (Facility) Power Capacity (kW)	Average Data Center Electricity Usage (kWh)	Electricity   Total Data Center   Average Data   Total Data   Average II   Cost Per	Average IT Electricity Usage (kWh)		Watts per Sq.ft.	Estimated Pow Usage Effectiveness (PUE)	Pass ADC Pro   Current   Sq. Ft. per Computers   Mainframes   Mainframes   Windows   Conducted?   Count (#)   Systems   Systems   Compatible   Count (#)   Systems   Systems   Compatible   Count (#)   Systems   Compatible   Count (#)   Systems   Compatible   Count (#)   Count (#)	Current Rack Count (#)	q. Ft. per C Rack	Super omputers or HPC Systems	dainframes (IBM or compatible)	fainframes (Other)	Nindows Servers
	Yes	1: Agency Owned	7: Unknown	Yes	1,500.000	195,794.260		300.000 96,618.070 \$0.05 53,676.71	\$0.05	53,676.71	2.03 No	% No	51	35	0	0	0	192
22	Yes	1: Agency Owned	7: Unknown	Yes		Com	Combined with Business Systems Data Center above	Systems Data Ce	nter above			No	31	41	0	0	0	40
TBD	Yes	3: Lease and retrofit	3: Tier III	Yes	1,500.000	545.000	1,000.000	408,000	\$0.05	110.27	1.34 No	No	37	100	8	0	0	0
	Yes	1: Agency Owned	7: Unknown	No	Unknown	TBD	150.000	78.500	\$0.05	19.96	96.67 Incomplete	No	27	30	0	0	0	48
	Yes	1: Agency Owned	7: Unknown	No	Unknown	Unknown	Unknown	1.200	\$0.03	25.00	25.00 Incomplete	No	1	48	0	0	0	I

Notes	ent d Additional Information	68% The power for these two data centers are combined through one UPS, so the PUE	68% is a combined calculation from average consumption in kWh.	48% EROB Data Center PUE is calculated from average demand in kW.	9/899	9/889
orage	S/ Percent Used	56	13	081	7.	9
Network Storage	SAN/NAS/ DAS - Used (TB)			0	181.7	
Net	SAN/NAS/ DAS - Fotal (TB)	100	*	370	337.6	18
	Total   Total   Total   Average CPU   SANNAASS   SAN	20/01	%8	%09	16%	16%
Virtualization	Total Operating Systems Count (#)	498	152	855	312	2
Virtua	Total Virtual OS Coumt (#)	190	25	0	182	0
	Total Virtual Host Count (#)	17	4	0	20	0
	Total Physical Server Count (#)	325	131	28	150	61
	Other	1	32	н	27	1
	Unix Linux Servers Servers	68	40	19	40	0
	Unix Linux Servers Servers	26	115		15	0

## Fugitive Emissions: Refrigerants and Fluorinated Gases, Mixed Refrigerants

Regulationality DOE 0.06.1, E.O. 13314
Interneting DOE 0.06.1, E.O. 13314
Interneting the state of the methodogy used for gathering information both in the CEDA and SSP merriter, an address SSO requests. It listential data is updated please be one to address this in your SSP merriter, lightlight the cell, and note the charge in the "Addressal formation" olumn.

Methodology

Methodology

Light	Pre-populated data by SPO to be reviewed
Green	and up dated with changes highlighted in blue
Orange	Fields that need to reviewed and updated with changes highlighted in blue.
Yellow	Optional data field to be completed, if applicable and available.
	Calculated fields No action required

	SPO Notes	SOT Observed to the SOT Observed to the Per Observed to the Per Observed Son Observ												
	Additional Information	Raw data not available for FVBs. Anthropogenic values were verified on tab 6.2, which included the refrigerants for FVBs.	Updated CWI data, includes amount recovered (519.8).	Updated CWI data, includes amounts emitted (43.5) and recovered (27).	19,813 15.6 from CWI. Verified	Moved to tab 6.2	includes the calculated 0.15625 lbs from BEA (0.674) maintenance records. Updated CWI data includes amount		Includes the calculated 13.5 Bis from BEA maintenance records and A42 the 325 Bs. released and A3 lbs recovered from CWI records. Verified	Indudes the calculated 0.6875 lbs. from BEA maintenance records.			Includes the calculated 10 7.824 lbs. from 8EA maintenance records.	includes the calculated
	Anthropogenic MtCO <sub>2</sub> e		9	- 1	19.813		(0.674)	4.599	3.442	0,437	2.218	149.289	7.824	
	JPs)	#N/A	3	9	t	#N/A	3	3		0	8	3	E.	
,	F-Gas Material	#N/A			c	#N/A	*	20	,	13		э	0.	
ŀ	Type 3 mount (Bs)	#N/A	9	9	E	#N/A	3	3	ī	8	0.780	112.190	i.	
	F. Gas: Type 3  Material Amount (II	#N/A			c	#N/A		э			HFC-143a	53.938 HFC-134a	e.	
ŀ	F.Gas: Type 2  daterial Amount (lbs)	#N/A.	9	3	Ē	#N/A	ī	3	E	E	090'0	53.938	5.000	
	F-Gas:	N/A		9		#N/A	*	D		0	HFC-134a	49.623 HFC-125	S.000 HFC-125	
	F.Gus. Type 2 F.Gus. Type 2 F.Gus. Type 3  Material Amount (Bs.) Material Amount (Bs.) Material Amount (Bs.)	HN/A		,	15.600	#N/A	(1.144)	15.600	54.210	0.138	0.660	49.623	5.000	
	F-Gas:	W/A		9	HFC-125	#N/A	(1.144) HFC-134a	HFC-32	417,000 HFC-152a	0.688 PFC-218	HFC-125	HFC-32	HFC-32	
	Emitted Refrigerant Quantity (Bs)	u.	(519.800)	16.500	15.600		(1.144)	15.600	417.000	0.688	1.500	215.750 HFC-32	10,000 HFC-32	
	Total capacity of refrigerant in equipment at end of inventory year (lbs)													
	l capacity of rigerant in ant at beginning story year (lbs)													
	Sum of all refrigerant disbursements (lbs)													
-	Simplified Ma Quantity in Sum of all storage at end of refrigerant inventory year acquisitions (lbs) (lbs)													
	uantity in storage at beginning of ventory year (Ibs)													
	Quantity Q Returned to impply (Bs) in		519,800	27.000			1.300							
	Quantity Purchased I				15.600			15.600	417.000	0.688	1.500	215.750	10.000	
	Composition	V/VH	R-12	R-22	R-125		R-134a	R-32	R-22/152a/124	R-290/22/218	R-125/143a/134a	R-32/125/134a	R-32/125	
	Refrigerant Type		R-12	R-22	R-125		R-134a	R-32	R-401A	R-403A	R-404A	R-407C	R-410A	
	Data Entry Type		2011 Fiscal Year	2011 Fiscal Year	2011 Fiscal Year	cal Year	ical Year	cal Year	2011 Fiscal Year	2011 Fiscal Year	2011 Fiscal Year	2011 Fiscal Year	ical Year	
	¥	2008	2011 Fis	2011 Fis	2011 Fis	2011 Fiscal Year	2011 Fiscal Year	2011 Fiscal Year	2011 Fis	2011 Fis	2011 Fis	2011 Fib	2011 Fiscal Year	
	Site #	S-1NI-S	603 INL-S	603 INL-S	603 INL-S	603 INL-S	S-1NI E09	603 INL-S	603 INL-S	603 INL-S	903 INL-S	S-1NI E09	S03 INL-S	
	PSO	E E	NE	NE	R	NE	H	NE	NE E	Ħ	NE NE	NE	Ħ	

1	-									Keirigei	Refrigerant Information	ition							ŀ			N	Notes
						Default A	Default Approach OR			Simplified Material Balance Approach	al Balance App	proach			F-Gas: Type 1	F-Gas: Type 2	Н	F-Gas: Type 3	Н	F-Gas: Type 4			
PSO	Site # Si	Site FY	Data Entry Type	Refrigerant Type	Composition	Quantity Purchased 1 Issued (lbs)	Quantity Q Returned to Supply (lbs) in	nantity in storage at beginning of ventory year (ibs)	Quantity in storage at end of inventory year (lbs)	Sum of all S refrigerant re acquisitions disi	Sum of all refrigerant disbursements eq (lbs) o	Sum of all Sum of all Total capacity of refrigerant refrigerant refrigerant refrigerant acquisitions dishurence acquisitions (bb) (bb) Inventory year (bb)	Total capacity of refrigerant in equipment at end of inventory year (bs)	Emitted Refrigerant Quantity M. (Bs)	Desired  Lambridge and  Quantity Material Amount (Br) Material Amount (Br) Material Amount (Br)  (Br)	bs) Material 4	cmount (Bs) Ma	terial Amount	(lbs) Mates	ial Amount (Ib	Anthropogenic MtCO <sub>2</sub> e	Additional Information	SPO Notes
M	603 INL-S		2011 Fiscal Year	R-502 R	R-22/115	100.000								100.000	9	0		a				Includes the calculated 100 lbs from BEA maintenance records.	
NE	S-1NI E09		2011 Fiscal Year	R-508B R	R-23/116	4.500								4.500 HFC-23		2.070 PFC-116	2.430	e	1			21.126 4.5 from BEA. Verified	
NE	S-TNI ED9		2010 Fiscal Year	R-407C R	R-32/125/134a	17.400								17.400 HFC-32		4.002 HFC-125	4.350 HFC	HFC-134a S	9.048	2 2		12.040 New BEAinput	
NE	S-1NI E09		2010 Fiscal Year	R-12 R	R-12	151.000	860.400							(709.400)	2		100		0	101	7	New CWI input, includes amount recovered.	
NE	S-1NI E09		2010 Fiscal Year	R-22 R	R-22	549.800	109.700							508.800		9	ī	a	1	3		New CWI input, includes amounts recovered and released.	
NE	S-1NI E09		2010 Fiscal Year	R-32 R	R-32	10.000								10.000 HFC-32	FC-32 10.000	- 000	î	e				2.948 New CWI input	
NE	603 INL-S		2010 Fiscal Year	R-125 R	R-125	30.200		. !						30.200 HFC-125	FC-125 30.200	- 00	5	20	9	2		38.356 New CWI input	
NE	93 INL-S		2010 Fiscal Year			2									#N/A #N/A	#N/A	#N/A	#N/A #N/A	A #N/A	A #N/A		Moved to tab 6.2	
NE	9 INI-S		2010 Fiscal Year	R-134a R	R-134a	121.800	3.500	ı						118.300 HFC-134a	FC-134a 118.300	- 001	č	е	0	0.00	69.758	New CW! input, includes amount recovered.	
NE	S-1NI 609		2010 Fiscal Year	R-143a R	R-143a	23.500								23.900 HFC-143a	FC-143a 23.900	- 004						41.195 New CWI input	
NE	S-1NI E09		2010 Fiscal Year	R-401A R	R-22/152a/124									65.000 HFC-152a		8.450 -	E		6	6	0.537	New CWI input, includes amount released.	
NE	S-1NI E09		2012 Fiscal Year	R-410A R	R-32/125	125.500								125,500 HFC-32		62.750 HFC-125	62.750			8		98.197 BEAdata inputs	
NE	603 INL-S		2012 Fiscal Year	R-404A R	R-125/143a/134a	4,100								4,100 HFC-125		1.804 HFC-134a	0.164 HFC-143a		2.132			6.063 BEA data inputs	
NE	603 INL-S		2012 Fiscal Year	R-407C R	R-32/125/134a	1,000								1.000 HFC-32		0.230 HFC-125	0.250 HFC-134a		0.520			0.692 BEA data inputs	
NE	S-7NI E09		2012 Fiscal Year	R-508B R	R-23/116	0.625								0.625 HFC-23		0.288 PFC-116	0.338	n	2	11		2.934 BEA data inputs	
NE	603 INL-S		2012 Fiscal Year	R-12 R	R-12		3.750							(3.750)		*	ï		8	8		CWI input, includes amount "recovered"	
NE	603 INL-5		2012 Fiscal Year	R-22 R	R-22	556.000	94:000							672.400	e	0	E		E			CWI input, includes amounts purchased, "Emitted," and "recovered" and AMWTP amounts purchased and released from Chiller D	
NE	603 INL-5		2012 Fiscal Year	R-134a R	R-134a	250.600	0.500							250.100 HFC-134a	FC-134a 250.100		ī				147.476	CWI input, includes 147.476 amount "recovered" and AMWTP data inputs	

# Fugitive Emissions: Fugitive Fluorinated Gases and Other Fugitive Emissions (Not to Include Process Emissions)

Requirement(g): DOE 0.486.1, E.O. 13514

Institutions: Provide PV 2012 fightive data using the default or simplified material balance approach, a short description of the methodology used for gathering information both in the CEDR and SRP marraitive, and address SPO requests.

Do not report process emissions in this that. If historical data is updated please be sure to address this in your SRP marraitive, highlight the cell, and note the change in the "Additional Information" column.

Saurge, SincLab All data reviewed, updated, and correct for FV2013 CEDR by Kim Fearless 11/192012.

Methodology

							Fugitive G	Fugitive Gas Information								No	Notes
						Default Approach	oproach OR		- is	Simplified Material Balance Approach	Balance Approx	the			I		
PSO	Site # Site	FY	Data Entry Type	Material Type	Composition	Quantity Purchased/ Issued (lbs)	Quantity Returned to Supply (Ibs)	Quantity in storage at beginning of nventory year (lbs)	Quantity in storage at en of inventory year (lbs)	Sum of all F- Gas Acquisitions (lbs) (lbs)	Sum of all F- Tc Gas G disbur sements in:	capacity of F- n equipment eginning of ory year (lbs)	Total capacity of all F-Gas in equipment at end Emitted (lbs) of inventory year that	Quantity Emitted (lbs)	Anthropogenic MtCO <sub>2</sub> e	Additional Information	SPO Notes
N N	603 INL-S	2008		HFC-125	CZHF5	100.380								100.380	127.488 a	Raw data not available, 127.488 anthropogenic numbers verified	
图	603 INL-S	2008		HFC-134a	CHZFCF3	253.420								253,420	149.434 a	Raw data not available, 149.434 anthropogenic numbers verified	
图	603 INL-S	2008		HFC-143a	C2H3F3	0.720								0.720	1.241 a	Raw data not available, 1.241 anthropogenic numbers verified	
图	603 INL-S	2008		HFC-152a	CH3CHF2	24.610								24.610	1.563 a	Raw data not available, 1.563 anthropogenic numbers verified	
E	603 INL-S	2008		HFC-23	CHE3	0.400								0.400	2.123 a	Raw data not available, 2.123 anthropogenic numbers verified	
图	603 INL-S	2008		HFC-32	CH2F2	78.000								78.000	22.997 a	Raw data not available, anthropogenic numbers verified	
图	603 INL-S	2008		HFC-365mfc	CH3CF2CH2CF3	22.830								22.830	8.222 a	Raw data not available, 8.222 anthropogenic numbers verified	
图	603 INL-S	2008		HFC-43-10mee	CF3CFHCFHCF2C	1.700								1.700	1.002 a	Raw data not available, 1.002 anthropogenic numbers verified	
Ħ	603 INL-S	2008		PFC-116	CZF6	0.500								0.500	2.087 a	Raw data not available, anthropogenic numbers verified	
NE NE	603 INL-S	2008		Sulfur hexafluoride	SF6	1.500								1.500	16.261 a	Raw data not available, 16.261 anthropogenic numbers verified	
NE	903 INL-S	2010 Fi	2010 Fiscal Year	Methane	CH4	22,972.900								23,344.890	222.370 A	Updated BEA & CWI inputs. AMWTP reported no emissions. Inclues CWI reported released (371.99)	
Ħ	903 INL-S	2010 Fi	2010 Fiscal Year	Carbon dioxide	CO2	1,593.100	0.100							1,635.660	0.742	Updated BEA & CWI Inputs. AWWTP reported no 0.742 emissions. Includes CWI reported released (42.56) and recovered (0.1)	
NE	603 INL-S	2010 Fi	2010 Fiscal Year	HFC-125	CZHFS	68.600		. '						68.600	87.126 A	Updated BEA & CWI inputs. 87.126 AMWTP reported no emissions.	
NE.	603 INL-S	2010 FI	2010 Fiscal Year	HFC-134a	CHZFCF3	1,240.300								1,277.330	753.203	Updated BEA & CWI inputs. AMWTP reported no emissions. Includes CWI reported released (37.03)	
B	603 INL-S	2010 F	2010 Fiscal Year	HFC-143a	C2H3F3	40.000		,						40.000	68.946 A	Updated BEA & CWI inputs. 68.946 AMWTP reported no emissions.	

							Fugitive Ga	Fugitive Gas Information								2	Notes
						Default Ap	Default Approach OR		Sin	Simplified Material Balance Approach	I Balance Appre	nach					
PSO	Site #	Site	FY Data Entry Type	Material Type	Composition	Quantity Purchased/ Issued (lbs)	Quantity C Returned to Supply (lbs) in	Quantity Quantity in storage Returned to at beginning of Supply (lbs) inventory year (lbs)	Quantity in storage at end of inventory year (lbs)	Sum of all F- Sum of all F- Gas Gas Gas acquisitions disbur sements (lbs) (lbs)		Total capacity of F- Gas in equipment at beginning of inventory year (lbs)	Total capacity of all F-Gas in equipment at end of inventory year flast	Quantity /	Anthropogenic MtCO <sub>2</sub> e	Additional Information	SPO Notes
Œ	603 INL-S	S-II	2010 Fiscal Year	HFC-152a	CH3CHF2	9.800								13.620	0.865	Updated BEA & CWI inputs.  AMWTP reported no emissions. Inleudes CWI reported released (3.82).	
图	603 INLS	l-S	2010 Fiscal Year	HFC-227ea	GHF7	13		1						7		Updated BEA & CWI inputs. AMWTP reported no emissions.	
Æ	603 INL-S	II-S	2010 Fiscal Year	HFC-32	CH2F2	18.300		ı						18.300	5.395	Updated BEA & CWI inputs. 5.395 AMWTP reported no emissions.	
曼	603 INL-S	S-II	2010 Fiscal Year	HFC-365mfc	CH3CF2CH2CF3	0.800								0.800	0.288	Updated BEA & CWI inputs.  0.288 AMWTP reported no emissions.	
E	603 INL-S	SI	2010 Fiscal Year	HFC-43-10mee	CF3CFHCFHCF2C	*		,						0.600	0.354	Updated BEA & CWI inputs.  0.354 AMWTP reported no emissions. Inclues CWI reported released (0.6)	
图	603 INL-S	5-71	2010 Fiscal Year	PFC-9-1-18	C10F18	2								to to	,	Updated BEA & CWI inputs. AMWTP reported no emissions.	
RE	903 INL-S	Sall	2010 Fiscal Year	Suffur hexafluoride	SF6	57.200								90.200	977.845	Updated BEA & CWI inputs. AMWTP reported no emissions. Includes CWI reported released (33)	
	603 INL-S	II-S	2010 Fiscal Year	HFC-245fa	CHF2CH2CF3	120.000		. 1						120.000	56.064	56.064 New CWI input	
	603 INL-S	II-S	2010 Fiscal Year	GFC-11	CCIBF	0.300								0.730	1.258	1.258 Includes CWI amount reported released (0.43)	
	603 INL:	11-5	2010 Fiscal Year	CFC-12	CCIZF2	89.000		ı I						89.000	326.994 New CWI	New CWI input	
	603 INL-S	IL-S	2010 Fiscal Year	CFC-113	CCIZFCCIFZ	1.700		Į						4.720	10.277	10.277 Includes CWI amount reported released (3.02).	
	603 INL-S	E-S	2010 Fiscal Year	HGFC-22	CHCIF2	16.250		ı						29.630	20.160	Updated CWI inputs.  20.160 Includes CWI amount reported released (13.38).	
	603 INL-S	L-S	2010 Fiscal Year	HCFC-141b (C2H3FCl2) Di C2H3FCl2	Di CZH3FCIZ	4.700								8.920	2.933	Updated CWI inputs.  2.933 Includes CWI amount reported released (4.22).	
	603 INL-S	S-TI	2010 Fiscal Year	Carbon Tetrachloride	CC14	K								3.340	2.121	Updated CWI inputs.  2.121 Includes CWI amount reported released (3.34).	
	903 INL-S	S-11	2010 Fiscal Year	Methyl Chloroform	C2H3Cl3	5.380								43.960	2.911	Updated CWI inputs.  2.911 Includes CWI amount reported released (2.95+85.63).	
	603 INL-S	I-S	2010 Fiscal Year	HFE-449s! (HFE-7100) Chr C4F9OCH3 & (CF	Chec4F90CH3 & (CE	3								0.680	0.092	Updated CWI inputs.  0.092 Includes CWI amount reported released (0.68).	
	603 INL-S	II-S	2010 Fiscal Year	HFE-449SI (HFE-7100) Chr C4F9OCH3 & (CF	The C4F9OCH3 & (CF.	I								0.680	0.092	Updated CWI inputs.  0.092 Includes CWI amount reported released (0.68).	
NE.	602 INL-I	3	2011		#N/A									ĸ			SPO Request: Please provide 2011 data if available
图	603 INLS	<u>S</u>	2011 Fiscal Year	Carbon dioxide	C02	1,247.700	5							1,749.170	0.793	Updated CWI inputs.  0.793 Includes CWI amount reported released (501.47).	
SE	NI E09		2011 Fiscal Year	Carbon Tetrachloride	1 1	0.160	¢							0.160	0.102	0.102 Verified inputs	
世	603 INL-S		2011 Fiscal Year 2011 Fiscal Year	CFC-113	CCIZFCCIFZ	14.200	x =							14.200	30.917	U.517 Verified inputs 30.917 Verified inputs	

The color   The							Fugitive Ga	Fugitive Gas Information									Notes
18   18   18   18   18   18   18   18						HSI	roach OR		Sim	pliffed Material	Balance Appro	ach					
Colume   2001   Colume   Col	PSO	Site #			Composition		Quantity C Seturned to upply (Ibs) in	puantity in storage at beginning of eventory year (bs)		Sum of all F- Gas acquisitions di (Ibs)			Total capacity of all F-Gas in equipment at end of inventory year flast		Anthropogenic MtCO <sub>2</sub> e	Additional Information	SPO Notes
100 Miles   2004   20	恩	603	1011 Fiscal Year	GFC-12	CCIZFZ	29.000	522.750							(463.750)	(1,703.862)	Includes calculated 522.75 lbs. recovered from CWI maintenance records.	
10   10   10   10   10   10   10   10	圏	603	800:		#N/A									×		Raw data not available, anthropogenic numbers verified in above rows	SPO Request: Please provide 2008 data if available
The color of the	E	603	010		#N/A									×			SPO Request: Please provide 2010 data if available
600 No.5         2001 No.5         167 20 No.5 <t< td=""><td>Ħ</td><td>603</td><td>:011 Fiscal Year</td><td>HGFC-141b (CZH3FCIZ)</td><td>) Di CZH3FCIZ</td><td>19.200</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>37.560</td><td>12.352</td><td>.36).</td><td></td></t<>	Ħ	603	:011 Fiscal Year	HGFC-141b (CZH3FCIZ)	) Di CZH3FCIZ	19.200								37.560	12.352	.36).	
600 NUSS         SMIT Sear Park         RECORDING         CHRIST         0.000	图	603	:011 Fscal Year	HGFC-22	CHCIF2	147.560	MX.							147.560	100.398	Includes calculated 43.5 lbs released and 27 lbs. recovered from CWI maintenance records.	
688 NAS         2010 Diseases         CD45C2         CD45C2 <th< td=""><td>B</td><td>603</td><td>011 Fiscal Year</td><td>HCFC-225ca</td><td>C3HF5CI2</td><td>0.840</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.840</td><td>0.046 \</td><td>Verified inputs</td><td></td></th<>	B	603	011 Fiscal Year	HCFC-225ca	C3HF5CI2	0.840								0.840	0.046 \	Verified inputs	
Mail	別別	603	2011 Fiscal Year '011 Fiscal Year	HCFC-225cb	C2HF5	0.840								281.400	357.394	Verified inputs Verified inputs	
68 NLS         2011 Feat Year         HC148         CATCHAR	EN EN	603	1011 Fiscal Year	HFC-134	C2H2F4		3.000							(3.000)	(1.361)	Includes calculated 3.0 lbs recovered from CWI maintenance records.	
633 NLS         2011 Fixed Year         HIC-183h         C74-02-03         11.400         1.60	B	903	:011 Fiscal Year	HFC-134a	CH2FCF3	593.319								593.319		Includes calculated 0.83125 lbs recovered from BEA maintenance records and recovered 1.25 lbs from CWI maintenance	
618 MLS         2011 Fical Year         HFC453h         Chicket         6600         0.448           613 MLS         2011 Fical Year         HFC445h         CATCACCTS         3.00         -         6620         72.15           613 MLS         2011 Fical Year         HFC445h [HF-7100] Chicket Societis (CT         1.860         -         -         663 MLS         -	E	603	1011 Fiscal Year	HFC-143a	CZH3F3	11.400	a							11.400			
633 NLS         2011 Fical Year         HC245h         CH202GT         3.100         .         69.20         7.103         99.29         7.103         99.20         7.103         99.20         7.103         99.20         7.103	图	603	2011 Fiscal Year	HFC-152a	CH3CHF2	6.600								6.600	0.419	Verified inputs	
683 NLS         2011 Fical Year         HEG32         CRS 200	NE	603	011 Fiscal Year	HFC-245fa	CHF2CH2CF3	3.100	•							66.200	30.929	Includes amount reported	
603 NLLS         2011 Fiscal Year         HFC-458in [HFE-7100] C.M. CHROCHES R.CE         1.850         .         5300         2530	图	603	011 Fiscal Year	HFC-32	CH2F2	268.500								268.500	79.163 \	Verified inputs	
603 NL-5         2011 Facal Year         HTF-4496 [HFE-7100] Chr. CH 90 CHS & [CF. 1.850]         1.850	E	603	011 Fiscal Year	HFC-365mfc	CH3CF2CH2CF3	3.800								5.900	2.125	Updated CWI inputs. Inclueds amount reported released (2.1)	
663 NLS         2011 Facal Year         Methane         CH4         33,186.100         .         33,753.80         23,753.80	NE	603	011 Fiscal Year	HFE-449sl (HFE-7100)	С№ С4F9ОСНЗ & (СF.	1.860	*							3.920	0.528	Updated CWI inputs, Inclueds amount reported released (2.06)	
603 NL-S         2011 Fiscal Year         Methy Choordorm         CH4         33,166.100         3.456.100         3.456.100         3.456.100         3.456.100         3.456.100         3.456.100         3.456.100         3.456.100         3.459.100	图	603	011 Fiscal Year	HFE-449sl (HFE-7100) v	Che C4F9OCH3 & (CF.	1.860								3.920	0.528	Updated CWI inputs. Inclueds amount reported released (2.06)	
603 NLAS         2011 Fiscal Year         Methyl Chlorofform         Ch1631         82.00         5.430	Ħ	603	:011 Fiscal Year	Methane	CH4	33,186.100	e							33,753.850	321.520	Updated CWI inputs. Inclueds amount reported released (567.75)	
603 NLS         2011 Fiscal Year         Sulfurheadflorible         SNE ABORDA         73.500         795.602           603 NLS         2012 Fiscal Year         Carbon dioxide         CCAR         1,010.430         1,005.100         0.465           603 NLS         2012 Fiscal Year         PIC-23-100         CAR         1,000.430         1,000.430         1,000.430           603 NLS         2012 Fiscal Year         PIC-23-100         CAR         1,000.400         1,000.400         1,000.400           603 NLS         2012 Fiscal Year         HI-C23         CAR         1,000.400         1,000.400         1,000.400         1,000.400           603 NLS         2012 Fiscal Year         HI-C23         CAR         1,100         1,000.400 <td>恩恩</td> <td>603</td> <td>2011 Fiscal Year 1011 Fiscal Year</td> <td>Methyl Chloroform Nitrous oxide</td> <td>C2H3Cl3 N2O</td> <td>82.070</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>82.070</td> <td>8.859 \</td> <td>Verified inputs Verified inputs</td> <td></td>	恩恩	603	2011 Fiscal Year 1011 Fiscal Year	Methyl Chloroform Nitrous oxide	C2H3Cl3 N2O	82.070								82.070	8.859 \	Verified inputs Verified inputs	
603 NL-S         2012 Fiscal Year         Carbon dioxide         CCAR         1,000.430         1,000.430         0,465           603 NL-S         2012 Fiscal Year         PTC-31-10         CCAR         0.500         1,000         0.500         1,000           603 NL-S         2012 Fiscal Year         PTC-31-10         CAR         1,100         0.500         1,100         3,493           603 NL-S         2012 Fiscal Year         PTC-31-10         CAR         1,100         0.500         1,000         0.500           603 NL-S         2012 Fiscal Year         PTC-218         CAR         1,310         0.500         0.504           603 NL-S         2012 Fiscal Year         PTC-218         CAR         2,130         6,592           65 NL-S         2012 Fiscal Year         Nitros Oede         NZ         0,120         0,017	B	603	:011 Fiscal Year	Suffur hexafluoride	SF6	73.500	14							73.500	796.802	Includes calculated 26 lbs. released from BEA spill records. Verified inputs	
603 NL-S         2002 Fiscal Year         PFC-5-13B         CC4R8         0.500           603 NL-S         2002 Fiscal Year         PFC-5-1-10         C4FB         1.100         1.100           603 NL-S         2002 Fiscal Year         PFC-5-1-1         C4FB         1.100         0.690           603 NL-S         2002 Fiscal Year         HFC-23         C4FB         1.310         1.310           603 NL-S         2002 Fiscal Year         HFC-23B         C4FB         1.310         1.310           603 NL-S         2002 Fiscal Year         HFC-2B         C4FB         1.310         1.310           603 NL-S         2002 Fiscal Year         NAO         0.120         0.120         1.310	E	603	1012 Fiscal Year	Carbon dioxide	200	1,010.430								1,025.160	0.465	BEA & CWI data inputs. Includes CWI amounts for sites 602 & 603 and amounts reported released	
608 NN-S         2012 Fecal Year         PFC-83-10         C4F0         1.100         1.100           608 NN-S         2012 Fecal Year         PFC-83-10         C4F3         0.660	E	603	1012 Fiscal Year	PFC-c318	C-C4F8	0.500								0.500	1.973	(0.05+14.68) BEA data inputs	
603 NL-S         2012 Fiscal Year         HTC-23         CHF3         1.310         1.310           603 NL-S         2012 Fiscal Year         HTC-218         CHF9         1.380         2.180           603 NL-S         2012 Fiscal Year         NTO-000 View View View View View View View View	图图	603	2012 Fiscal Year 2012 Fiscal Year	PFC-3-1-10 HFC-41	C4F10	1.100								0.000	3.493	BEA data inputs	
Wild Wile         2012 Fical Year         PFC218         C3180         0.180           668 WLS         2012 Fical Year         Without code         N2O         0.120         0.120	E	603	2012 Fiscal Year	HFC-23	CHF3	1.310								1.310	6.952	BEA data inputs	
	男 男	603	2012 Fiscal Year 2012 Fiscal Year	PFC-218 Nitrous oxide	C3F8 N2O	2.180								2.180	6.922 8	BEA data inputs BEA data inputs	

Notes	SPO Nates																				
No.	Additional Information	0.725 BEA data inputs	65.045 BEA data inputs, includes reported 6 lb release	191.220 BEA data inputs	BEA & CWI data inputs.  1.520 Includes CWI amount	21.511 BEA data inputs	BEA & CWI data inputs. 95.108 Includes CWI amount	reported released (24.6). BEA & CWI data inputs. 314.435 Includes CWI amount	reported released (0.1). 41.041 BEA data inputs	BEA & CWI data inputs.  1.330 Includes CWI amount reported released (5.69).	2000 Au 51 Mg	BEA & CWI data inputs. Includes CWI amount reported released (4.74)		5 mg	BEA & CWI data inputs. 0.018 Includes CWI amount reported released (0.21).			BEA & CWI data inputs. Includes CWI amount		Updated CWI data, Includes amount recovered. Moved from tab 6.1	New CWI input, includes (0.907) amount recovered. Moved from tab 6.1
	Anthropogenic MtCO <sub>2</sub> e	0.725	65.045	191.220	1.520	21.511	95.108	314,435	41.041	1.330	397.856	12.280	5.994	1.250	0.018	0.089	1.993	0.125	0.125	(1.361)	(0.907)
Ī	Quantity Emitted (bs)	1.230	6.000	150.560	4.220	12.480	203.570	33,010.090	139.200	20.950	674.710	5.640	8.810	3.800	0.330	0.330	30.100	0.930	0.930	(3.000)	(2.000)
	Total capacity of all F-Gas in equipment at end I for inventory year																				
	capacity of F- n equipment eginning of ory year (lbs)																				
	mplified Material Balance App  Sum of all F.  Gas acquisitions (lbs) (lbs)																				
	Quantity in storage at end of inventory year (lbs)																				
Fugitive Gas Information	uantity in storage at beginning of ventory year (lbs)																				
Fugitive G	ult Approach  y Quantity Q ed. Returned to bs) Supply (lbs) in																			3.000	2.000
Ī	Quantity Purchased/ Issued (lbs)	1.230	£	150.560	3.690	12.480	178.970	33,009,990	139.200	15.260	408.020	0.900	1.350	0.670	0.120	0.120	0.630	13	3	T.	3.
	Composition	CF3CFHCFHCF2C	SF6	CZHF5	CH3CF2CH2CF3	C2H3F3	CHF2CH2CF3	CH4	CH2F2	CH3CHF2	CH2FCF3	CCIZFCCIFZ	CHCIF2	Di CZH3FCIZ	C3HF5CI2	C3HF5Cl2	CZH3Cl3	Che C4F9OCH3 & (CF.	Che C4F9OCH3 & (CF.	C2H2F4	C2H2F4
	Material Type	HFC-43-10mee	Sulfur hexafluoride	HFC-125	HFC-365mfc	HFC-143a	HFC-245fa	Methane	HFC-32	HFC-152a	HFC134a	CFC-113	HGFG-22	HCFC-141b (CZH3FCIZ) Di CZH3FCIZ	HCFC-225ca	HCFC-225cb	Methyl Chloroform	HFE-449sl (HFE-7100) ChcC4F9OCH3 & (CF	HFE-449s  (HFE-7100) Chr C4F9OCH3 & (CF	HFC-134	HFC-134
	Data Entry Type	2012 Fiscal Year	2012 Fiscal Year		2012 Fiscal Year	2012 Fiscal Year		2012 Fiscal Year	2012 Fiscal Year	2012 Fiscal Year	2012 Fiscal Year	2012 Fiscal Year	2012 Fiscal Year	2012 Fiscal Year	2012 Fiscal Year	2012 Fiscal Year	2012 Fiscal Year	2012 Fiscal Year	2012 Fiscal Year	2011 Fiscal Year	2010 Fiscal Year
	FY	2012 Fis	2012 Fis	2012 Fiscal Year	2012 Fis	2012 Fis	2012 Fis	2012 Fis	2012 Fis	2012 Fis	2012 Fis	2012 Fis	2012 Fis	2012 Fis	2012 Fis	2012 Fis	2012 Fis	2012 Fis	2012 Fis	2011 Fis	2010 Fig
	e# Site	93 INI-S	603 INL-S	993 INL-S	603 INL-S	603 INL-S	603 INL-S	903 INL-S	603 INL-S	603 INL-S	603 INL-S	603 INL-S	903 INL-S	603 INL-S	603 INL-S	603 INL-S	603 INL-S	903 INL-S	993 INL-S	603 INL-S	603 INL-S
	PSO Site#	NE	NE	NE	NE	NE		NE	图		NE	NE								NE	NE

# Industrial Process Emissions By Process (Not Reported under Tab 6.2 Fugitive F-gases)

## Requirement(s): DOE O 436.1, E.O. 13514

Methodology

<u>Instructions</u>: Provide FY 2012 industrial process emission data by process, a short description of the methodology used for gathering information both in the CEDR and SSP narrative, and address SPO requests. Report emissions at the individual process level; a laboratory is not considered a single process. If historical data is updated please be sure to address this in your SSP narrative, highlight the cell, and note the change in the "Additional Information" column. Source: SiteLab



			Š.	2 8	8	1		
Notes		SPO Notes						
	(6)	Composition Quantity Anthropogenic Additional Information Emitted (lbs) MtCO <sub>2</sub> e						
		Anthrop ogenic MtCO <sub>2</sub> e	*	10)	ю	31	Þ	×
		Quantity Emitted (lbs)	1707					
		Composition	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Industrial Process Information	8	GHG Type						
Industrial Proc	is a second of the second of t	Process Type	5					
		FY						
	7	Site	100					
	8 8	Site #						
		PSO	NE					

# Fugitive Emissions: On-site Wastewater Treatment (Domestic Only)

Requirement(s): DOE O 436.1, E.O. 13514

Instructions: Provide FY 2012 on-site wastewater treatment plant/system data by type, a short description of the methodology used for gathering information both in the CEDR and SSP narrative, highlight the cell, and note the change in the "Additional Information". column.

All data reviewed, updated, and correct for FY2013 CEDR by Kim Frerichs 11/19/2012.

Source: Site/Lab
Methodology

Light Pre-populared data by 3PO to be reviewed Green and updated with changes highlighted in blue.

Orange Folds that need to reviewed and updated with changes highlighted in blue.

Yellow applicable and a field to be completed if applicable and available.

Red Calculated fields. No action required.

	SPO Notes		SPO Request: Do not have raw data. Please provide original data, if available	SPO Request: Do not have raw data. Please provide original data, if available	
Notes	Additional Information	Updated # of people for CWI. Changed equation in Cell N13 to reflect change to 0.325 from 0.3.	S po	s pa	BEA, CWI, and ANIWTP raw data input. Changed Cell Nis for reflect change to 0.325 from 0.3. Changed number of workdays based on commuter survey responses.
	Anthropogenic Addit	Updatee 224.275 CWI. Ch cell N13 to 0.325	All on-site wastewater in only at site 603. Change 202.332 equation in Cell NL4 to reflect change to 0.325 from 0.3.	All on-site wastewater i only at site 603. Change 235.926 equation in Cell NL5 to reflect change to 0.325 from 0.3.	BEA, CWI, and AMWTP radata input. Changed Cell N15 to reflect change to 216,453 0.325 from 0.3. Changed number of workdays bass on commuter survey responses.
	Biogenic MtCO <sub>2</sub> e		SL.	æ	
	Septic Systems (Persons)	26.000	16.000	37.000	27.725
	Wastewater Treatment Lagoons (Persons)	3,791.000	3,427.000	3,979.000	3,734.678
iion	Effluent Discharge to Effluent Discharge to Rivers and Estuaries Rivers and Estuaries with Nitrification / Without Nitrification (Persons)				
tewater Treatment Information	Centralized Effluent Discharge to Effluent Discharge to WWTP without Rivers and Estuaries Rivers and Estuaries Nitrification / with Nitrification / Dentirification (Persons) (Persons)				
On-Site Wastewater T	Centralized WWTP without Nitrification / Denitrification (Persons)				
S-uO	Centralized WWTP with Nitrification / Denitrification (Persons)				
	Centralized WWTP with Anaerobic Digestion (Persons)				
	Workdays per Year	192.000	192.000	192.000	188.000
	FY	2011	2008	2010	2012
	Site	903 INI-S	903 INL-S	603 INL-S	903 INL-S
	Site #	603	603	909	603
	PSO	NE	NE	NE	NE

## Contracted Wastewater Treatment (Domestic Only)

Methodology

Requirements: DOE 0.436.1, E.O. 13514

Instructions: Provide FY 2012 contracted wastewater treatment plant/system data, a short description of the methodology used for gathering information both in the CEDR and SSP narrative, and address SPO-requests. If actual porcentiges are available from wastewater treatment plant/system contractors, site may overnide the current actualised percentages in columns I, K, M, and O. Finally, if historical data is updated please be sure to address this in your SSP narrative, lightlight the cell, and note the charge in the "Additional Information" column.

SOURCE: Site/Lab

All data reviewed, updated, and correct for FY2013 CEDR by Kim Frerichs 11/19/2012.

Light	Light Pre-populated data by SPO to be reviewed
Green	and updated with changes highlighted in blue.
Onomon	Fields that need to reviewed and updated with
O ange	changes highlighted in blue.
Vollow	Optional data field to be completed, if
Tellow	applicable and available.
Red	Calculated fields. No action required.

Notes	SPO Notes		SPO Request: Please check 15.977 Adjusted workdays per Town accurecy/consistency following schedule. Updated CWI data. change in reporting method vs 2008 and 2010.	Adjusted workdays per Town Schedule. Updated CWI data, actual data, if available. Do not have raw data.		SPO Request: Please provide actual data, if available. Do not have raw data.	SPO Request: Please provide actual data, if available. Do not have raw data.	SPO Request: Please provide 2011 data if available	
	Total Additional Information		Adjusted workdays per Town schedule. Updated CWI data.	Adjusted workdays per Town schedule. Updated CWI data.	Adjusted workdays per Town schedule. Updated CWI data.	Cannot find source of this data. There should not be any contracted WWT at Site. Removed data.	Cannot find source of this data. There should not be any contracted WWT at Site. Removed data.	NA - All contracted WWT is at Site 602.	BEA, CWI, and AIMWTP raw BEA, CWI, and AIMWTP raw data entered. Updated 15.003 Column R to 0.325. Updated # workdays per year based on commuter survey
	Total Anthropogenic	MICO2e	15.977	14.184	16.589			ī	15.003
	Biogenic MtCO <sub>2</sub> e		7.521	6.677	7.809			٠	7.063
	Wastewater Treatment Lagoons	Persons	,	7117	=	r	1	•	1
	Waste	%	%0:0	%0:0	%0.0	%0.0	%0:0	%0.0	%0.0
	rge to Rivers ss without enitrification	Persons	2,531.0	2,247.0	2,628.0		ì	ī	2,421.7
	Effluent Discharge to Rivers and Estuaries without Nitrification / Denitrification	%	100.0%	100.0%	100.0%	63.5%	63.5%	63.5%	100.0%
mation	rge to Rivers ies with enitrification	Persons		3 <b>8</b> 3	11		п		T
tracted Wastewater Information	Effluent Discharge to Rivers and Estuaries with Nitrification / Denitrification	%	%0:0	%0.0	%0.0	36.5%	36.5%	36.5%	%0.0
acted Was		Persons	ı	787	*	ı	ii.	r	
Contr	Centralized WWTP Centralized WWTP with Nitrification / without Nitrification / Denitrification	%	%0.0	%0.0	%0.0	63.5%	63.5%	63.5%	%0.0
	d WWTP fication / ication	Persons	100.0% 2,531.0	2,247.0	2,628.0	c	,	τ	100.0% 2,421.7
	Centralized WWTP with Nitrification / Denitrification	%	100.0%	100.0%	100.0%	36.5%	36.5%	36.5%	I
	Centralized WWTP with Anaerobic	Digestion (Persons)	2,531.0	2,247.0	2,628.0				2,421.7
	Workdays per Year		216.000	216.000	216.000	230.000	230.000	230.000	212.000
	FY		2011	2008	2010	2008	2010	2011	2012
	Site # Site		602 INL-I	602 INL-I	602 INL-I	903 INL-S	903 INL-S	S-1NI E09	602 INL-I
	PSO		NE	NE	NE	NE	NE	NE	NE

### **Business Air Travel**

Requirements): DOE 0.456.1, E.O. 13514

Instructured and of the performance of the performance of the methodology used for gathering information both in the CEDR and Instructured service PV 2012 art revel clade by the trevel information will be pulled by DOE beadquartes from GovTrip. If historical data is updated please be sure to address this upwarts the pulled by DOE beadquartes from GovTrip. If historical data is updated please be sure to address this in your SSP paramice, publicity the cell, and note the change in the "Additional information" column.

All data reviewed, updated, and correct for FV2013 CEDR by Kim Frerichs 14/19/2012.

Methodology

Light	Pre-populated data by SPO to be reviewed
Green	and up dated with changes highlighted in blue.
	Fields that need to reviewed and updated with
Orange	changes highlighted in blue.
A7.41	Optional data field to be completed, if
renow	applicable and available.
Red	Calculated fields. No action required

					Air Travel Information						Notes
PSO	Site #	Site	FY	Process Type	Flight Type	Fuel Type	Consumption/ Usage	Unit of Measure	Anthropogenic MtCO2e	Additional Information	SPO Notes
R	602 INL-I	3	2008 A	2008 Air Business Travel						Updated information below	SPO Request: Do not have raw data. Please provide original data, if available. Used goal seek to estimate miles as unknown to match original 08 MtCO2e estimate of: 18:9
NE NE	602 INL-I	3	2008 Ai	2008 Air Business Travel	Unknown	Jet Fuel	25,295,840	25,295,840 Passenger miles	4,834.971	BEA AMWTP data entered. All CWI data entered below.	
B	602 INL-I	3	2008 Ai	2008. Air Business Travel Unknown	Unknown	Jet Fuel	4,642,441	4,642,441 Number of trips	887.342		
Ħ	602 INL-I	3	2010 A	2010 Air Business Travel Unknown	Ипкломп					Updated information below	SPO Request Do not have raw data. Used goal seek to estimate miles as unknown to match original 08 MrCOze estimate of; 7,349.1. Please provide original data, if available, and provide breakdown by flight type.
图	602 INL-I	н	2010 A.	2010 Air Business Travel	Short Haul (< 300 miles)	Jet Fuel	3,477,822	3,477,822 Passenger miles	1,017.975	Updated CWI and AMWTP data	
E E	602 INL-I	=	2010 A	2010 Air Business Travel	Medium Haul (300 mile ≤ x < 700 mile)	Jet Fuel	1,997,691	7,997,691 Passenger miles	1,336.006	Updated CWI and AMWTP data	
图	602 INL-I	3	2010 A	2010 Air Business Travel	Long Haul (≥ 700 miles)	Jet Fuel	22,586,394		4,317.095	Updated CWI and AMWTP data	
思	602 DC	602 DOE Idaho	2010 A	2010 Air Business Travel	GSA Travel MIS	Jet Fuel	932,398	lbs c02	428.141		
E E	602 INL-I	5	2011 A		Short Haul (< 300 miles)	Jet Fuel	3,066,129	Passenger miles	897.470	897.470 INL numbers verified	
# H	602 INL-I	3 3	2011 A	2011 Air Business Travel	Medium Haul (300 miles x < 700 mile)	let Fuel	21 963 466	5,244,640 Passenger miles 21 963 466 Passenger miles	4 198 031	4 198 031 INI numbers verified	
图	602 DO	602 DOE Idaho	2011 A	2011 Air Business Travel	GSA Travel MIS	Jet Fuel	862,754	862,754 lbs CO2	396.162		
閚	602 INL-I	3	2008 A	2008 Air Business Travel Unknown	Unknown					Deleted - updated 2008 numbers above	SPO Request: Do not have raw data. Please provide original data, if available. Used goal seek to estimate miles go unknown to match original OB MtCO2e estimate of: 18.9
NE	602 INL-I	Е	2012 A	2012 Air Business Travel	Short Haul (< 300 miles)	Jet Fuel	15,872,091	15,872,091 Passenger miles	4,645.836	BEA, CWI, and AMWTP raw data entered.	
SE	602 INL-I	3	2012 A	2012 Air Business Travel	Medium Haul (300 mile ≤ x < 700 mile)	Jet Fuel	4,696,957	4,696,957 Passenger miles	784.622	BEA, CWI, and AMWTP raw data entered.	
NE	602 INL-I	ы	2012 A	2012 Air Business Travel	Long Haul (≥ 700 miles)	Jet Fuel	2,456,344	2,456,344 Passenger miles	469.498	BEA, CWI, and AMWTP raw data entered.	

## Business Ground Travel (Domestic Only)

Keys:

Light Per-populated data by SPO to be reviewed.

Green and updated with changes highlighted in blue.

Orange Fields that need to reviewed and updated with

Veilone Optional and read or to extreme that the completed with

Veilone Optional and find find to be completed, if

Field and prolicitly and oraclinite.

Business Ground Travel (Domestic Only)	Key:	
× 2	Light F	Pre-pop
	Green	and up de
<u>Кеодителлен</u> (s): DOE O 436.1, E.O. 13514	Popular	Fields th
Instructions: Provide FY 2012 ground travel data for the primary contractor, a short description of the methodology used for gathering information both in the CEDR and	v	changes
SSP narrative, and address SPO requests. Federal business ground travel information will be pulled by DOE headquarters from Gw/Tnp. If historical data is updated please	Yellow	Options
be sure to address this in your SSP narrative, highlight the cell, and note the change in the "Additional Information" column.	0	applicab
Source: SiteLab All data reviewed, undarted, and correct for FY2013 CEDR by Kim Frerichs 11/19/2012	Red	Calculat
Methodology		

				Ground	Ground Travel Information	mation					Z	Notes
PSO	Site # Site	FY	Process Type	Vehicle Type	Fuel Type	Consumption/ Usage	Unit of Measure	Site Average Miles per Trip	Default Average Miles per Trip	Anthropogenic MtCO <sub>2</sub> e	Additional Information	SPO Notes
R	602 INL-1	2008 Rent:	2008 Rental Trip Mileage	Passenger Car	Gasoline	8,971	8,971 Number of Agency Busin	419.000	210.000	1,408.000	Cannot provide raw data for all contractors. Raw data is available for BEA upon request.	SPO Request. Do not have can drait. Please provide cannot provide raw original drait, a fasalable. data for all contraction. Used goal seek to setimate Raw data is available for # of passenger car trips at BEA upon request. 419 miles per trip for match original 80 Mt.Oze estimate of 1,1408.
E	602 DOE Idaho	hc 2010 POV Mileage	Mileage	Passenger Car	Gasoline	117,180	117,180 Total Reimbursed Mileage	95	î	43.892	43.892 DOE data	SPO Note: GSA Travel MIS data, broken down by site office.
呂	602 INL-I	2010 POV Mileage	Mileage	Passenger Car	Gasoline	661,846	Total Reimbursed Mileage	e.		247.908	BEA raw data updated. Verified Anthro #s	
R	602 INL-I	2010 POV Mileage	Mileage	SUV or Truck	Gasoline	325,984	Total Reimbursed Mileage	96		174.182	BEA raw data updated. Verified Anthro #s	
R	602 INL-I	2010 Renta	2010 Rental Trip Mileage	Passenger Car	Gasoline	173	173 Number of Agency Business Trips	ess Trips	210.000	13.608	Updated CWI data - use default miles per trip	
R	602 INL-I	2010 Renta	2010 Rental Mileage by Class	Economy	Gasoline	5,041	Total Mileage by Vehicle Type	Type		1.613	BEA raw data updated. Verified Anthro #s	
Ħ	602 INL-I	2010 Renta	2010 Rental Mileage by Class	Compact	Gasoline	37,215	Total Mileage by Vehicle Type	Type		10.862	BEA raw data updated. Verified Anthro #s	
R	602 INL-I	2010 Renta	2010 Rental Mileage by Class	Midsize	Gasoline	334,582	Total Mileage by Vehicle Type	Туре		106.688	BEA raw data updated. Includes Classes C + D	
RE	602 INL-I	2010 Renta	2010 Rental Mileage by Class	Full Size	Gasoline	226,232	Total Mileage by Vehicle Type	Type		89.785	89.785 BEA raw data updated.	
R	602 INL-I	2010 Rent	2010 Rental Mileage by Class	Luxury	Gasoline	29,478	Total Mileage by Vehicle Type	Type		13.262	BEA raw data updated. 13.262 Includes Classes G, H, & K.	
NE	602 INL-I	2010 Renta	2010 Rental Mileage by Class	Minivan/Wagon	Gasoline	16,462	Total Mileage by Vehicle Type	Type		7.241	7.241 BEA raw data updated.	
图	602 INL-I	2010 Renta	2010 Rental Mileage by Class	Small SUV	Gasoline	106,170	Total Mileage by Vehicle Type	Type		47.477	BEA raw data updated. Includes Classes F + S	
NE	602 INL-I	2010 Renta	2010 Rental Mileage by Class	Medium SUV	Gasoline	79,812	79,812 Total Mileage by Vehicle Type	Туре		42.554	BEA raw data updated. Includes Classes W + X	
SE	602 INL-I	2010 Renta	2010 Rental Mileage by Class	Large SUV	Gasoline	34,162	34,162 Total Mileage by Vehicle Type	Туре		19.205	BEA raw data updated. Includes Classes L + Z	

				Ground 7	Ground Travel Information	mation.						Notes
PSO	Site # Site	FY	Process Type	Vehicle Type	Fuel Type	Consumption/ Usage	Unit of Measure	Site Average Miles per Trip	Default Average Miles per Trip	Anthropogenic MtCO <sub>2</sub> e	Additional Information	SPO Notes
R	602 INL-I	2010 Rental	Rental Mileage by Class	Passenger Van	Gasoline	6,346	Total Mileage by Vehicle Type	Туре		3.745	3.745 BEA raw data updated.	
NE	602 INL-I	2010 Rental	Rental Mileage by Class	Unknown	Gasoline	49,858	Total Mileage by Vehicle Type	Туре		27.431	27.431 BEA raw data updated.	
恩	602 DOE Idaho	hc 2011 POV Mileage	fileage	Passenger Car	Gasoline	104,790	104,790 Total Reimbursed Mileage	3e	я	39.251	39.251 DOE data	SPO Note: GSA Travel MIS data, broken down by site
图	602 INL-I	2011 Rental	Rental Trip Mileage	Passenger Car	Gasoline	409	Number of Agency Business Trips	less Trips	210.000	32.172	CWI data verified. Used new default miles per	
E	602 INL-I	2011 Rental	Rental Mileage by Class	Economy	Gasoline	2.108	Total Mileage by Vehicle Type	Type	х	0.674	0.674 BEA data verified.	
图	602 INL-1	2011 Rental	Rental Mileage by Class	Compact	Gasoline	43,407	Total Mileage by Vehicle Type	Type	X:	12.669		
E L	602 INL-I	2011 Rental	Rental Mileage by Class	Midsize Full Size	Gasoline	204 424	Total Mileage by Vehicle Type	Type		81 130	75.490 BEA data verified.	Ĭ
E E	602 INL-I	2011 Rental	Rental Mileage by Class	Luxury	Gasoline	39,563	Total Mileage by Vehicle Type	Type	е п	17.798	BEA data verified.	
NE	602 INL-I	2011 Rental	Rental Mileage by Class	Minivan/Wagon	Gasoline	17,652	Total Mileage by Vehicle Type	Type	е	7.765		
图	602 INL-I	2011 Rental	Rental Mileage by Class	Small SUV	Gasoline	119,589	Total Mileage by Vehicle Type	Type	э	53.478	BEA data verified.	
E E	602 INL-I	2011 Rental	Rental Mileage by Class Rental Mileage by Class	Large SUV	Gasoline	44,974	Total Mileage by Vehicle Type	Type	с э	25.283	34.852 BEA data verified. 25.283 BEA data verified.	
E	602 INL-I	2011 Rental	Rental Mileage by Class	Passenger Van	Gasoline	2,402	Total Mileage by Vehicle Type	Type	v	1.418	BEA data verified.	
出	602 INL-I	2011 Rental	Rental Mileage by Class	Unknown	Gasoline	5,352	Total Mileage by Vehicle Type	Type	10	2.945	2 945 BEA data verified.	
NE	602 INL-I	2011 POV Mileage	lileage	Passenger Car	Gasoline	820,539	Total Reimbursed Mileage	3e	×	307.350	307.350 BEA data verified.	
NE	602 INL-I	2011 POV Mileage	lileage	SUV or Truck	Gasoline	445,385	Total Reimbursed Mileage	ge.	е	237.981	BEA data verified.	
											Changed to site 602, since all other data	SPO Request: Do not have raw data. Please provide
											reported for that stie.	original data, if available.
N.	1-INI-1	2008 Rental	Rental Trip Mileage	Passenger Car	Gasoline	389	389 Number of Agency Business Trips	ess Trips	210 000	30.573	Raw data not available.	
							0	L			Assume these are from	
											CWI - changed default 419 miles per trip to miles per trip to current original 08 MtCO2e	419 miles per trip to match to original 08 MtCO2e
												estimate of: 61.
NE	602 INL-I	2012 Rental	Rental Mileage by Class	Economy	Gasoline	1,719	Total Mileage by Vehicle Type	:Type	x	0.550	BEA - Class A	
NE	602 INL-I	2012 Rental	Rental Mileage by Class	Compact	Gasoline	20,382	Total Mileage by Vehicle Type	Type	×	5.949	5.949 BEA - Class B	
SE	602 INL-I	2012 Rental	Rental Mileage by Class	Midsize	Gasoline	253,838	Total Mileage by Vehicle Type	Type	2	80.941	80.941 BEA - Includes Classes C	
NE	602 INL-I	2012 Rental	Rental Mileage by Class	Full Size	Gasoline	173,849	Total Mileage by Vehicle Type	Туре	a	68.995	BEA - Class E and AMWTP data inputs	
E			7				The state of the s					
ING	DOZ IME-I	ZUIZ KENIAI	Refital Milledge by Class	ruxury	aggonna	769,16	Total Milledge by Venicle Type	adkı	C.	10.530	(G, n, and k) and AMWTP data inputs	
E	602 INL-I	2012 Rental	Rental Mileage by Class	Minivan/Wagon	Gasoline	20,767	Total Mileage by Vehicle Type	Type		9.135	BEA - Class V and	
E	602 INL-1	2012 Rental	Rental Mileage by Class	Small SUV	Gasoline	106.077	Total Mileage by Vehicle Type	Type		47.435	47.435 BFA - Classes F and S	
NE	602 INL-I		Rental Mileage by Class	Medium SUV	Gasoline	73,139	Total Mileage by Vehicle Type	Туре	к	38.996	BEA - Classes W and X	
N.	1- INI -1	2012 Rental	Rental Mileage by Class	VI S observed	Gasoline	21 720	Total Mileage by Vehicle Tyne	Tvne		12 210	BEA - Classes I and 7	
	700		constant and annual	and and and			none de regional de la company	201	3	4	BFA - Class P and	
NE	602 INL-I	2012 Rental	Rental Mileage by Class	Passenger Van	Gasoline	4,153	Total Mileage by Vehicle Type	Туре	x	2.451	AMWTP data inputs	
NE	602 INL-I	2012 Rental	Rental Mileage by Class	Unknown	Gasoline	2,745	Total Mileage by Vehicle Type	Type	E	1.510	1.510 BEA - Class Other	
NE	602 INL-I	2012 POV Mileage	lileage	Passenger Car	Gasoline	403,806	Total Reimbursed Mileage	36	ø	151.254	151.254 BEA and AMWTP data inputs	nputs
NE	602 INL-I	2012 POV Mileage	lileage	SUV or Truck	Gasoline	199,569	Total Reimbursed Mileage	as	e	106.635	106.635 BEA and AMWTP data inputs	nputs
NE	602 INL-I	2012 Rental	Rental Trip Mileage	Passenger Car	Gasoline	174	Number of Agency Business Trips	less Trips	210.000	13.687	13.687 CWI data for FY12	

## Employee Commuting (Domestic Only)

Requirement(s): DOE O 436.1, E.O. 13514

Instructions: Provide FY 2012 commuting data for both Federal and primary contractor employees, a short description of the methodology used for gathering information both in the CEDR and SSP narrative, highlight the cell, and note the change in the "Additional Information" column.

Source: Site/Lab

Methodology

All data reviewed, updated, and correct for FY2013 CEDR by Kim Frerichs 11/19/2012.

Ney:
Light Per-populated data by SO to be reviewed
Light Per-populated data by SO to be reviewed
Green and updated with changes highlighted in blue.
Crange Fields that weter for reviewed and updated with
changes highlighted in blue.
Yellow
Optional data field to be completed. If
To claculated fields. No action required.

				Gro	Ground Travel Information	Information					N	Notes
PSO	Site # Site	FY	Process Type	Vehicle Type	Fuel Type	Consumption/ Usage	Unit of Measure	Site Number of Commute Days per Year	Default Number of Commute Days per Year	Anthropogenic MtCO <sub>2</sub> e	Additional Information	SPO Notes
NE	602 INL-I	2008 Pe	2008 Personal Owned Vehicles	POV Passenger Car	Gasoline	238,244		8	230.000		Not sure where this came from, updated contractor Data Call culmittes below	SPO Request: If available, please provide breakdown by site and
NE	602 INL-I	2008 Pe	2008 Personal Owned Vehicles	POV Passenger Car	Gasoline	25,676		216.000		2,077.377	BEA and AMWTP data updated	
NE	903 INL-S	2008 Pe	2008 Personal Owned Vehicles	POV Passenger Car	Gasoline	136,329		192.000		9,804.431	9,804.431 BEA, CWI and AMWTP data updated	
NE	602 INL-I	2010 Pe	2010 Personal Owned Vehicles	POV Passenger Car	Gasoline	215,825		216.000	230.000	17,461.863	Cannot provide data by site and process type for all contractors. Updated # of commute days per year to be same as previous years. Data is available for CWI and BEA, upon	SPO Request: if available, please provide breakdown by site and process/vehicle type.
	602 INL-I	2011 Pe	2011 Personal Owned Vehicles	POV Passenger Car	Gasoline	23,597		216.000	230.000	1,909.202	BEA data updated. ICP and AMWTP data verified.	
	602 INL-I	2011 Pe	2011 Personal Owned Vehicles	POV SUV or Truck	Gasoline	15,149		216.000	230.000	1,748.384	BEA data updated. ICP and AMWTP data verified.	
	602 INL-I	2011 Pe	2011 Personal Owned Vehicles	POV SUV or Truck	Diesel	1,918		216.000	230.000	232.573	BEA data updated. ICP and AMWTP data verified.	
	602 INL-I	2011 Pe	2011 Personal Owned Vehicles	Motorcycle	Gasoline	332		216.000	230.000	12.248	BEA data updated. ICP and AMWTP data verified.	
NE	602 INL-I	2011 Pé	2011 Personal Owned Vehicles	POV Passenger Car	Hybrid	701		216.000	230.000	28.787	BEA data updated. Difference in SPO Note 28.787 Anthro (from 55.3 to 32.9 - change to which is n hybrid and error on source worksheet, "hybrid".	SPO Note: Site entered "alternative" which is not an option, changed to   "hybrid".
	602 INL-I	2011 Pe	2011 Personal Owned Vehicles	POV Passenger Car	Diesel	827		216.000	230.000	80.756	BEA data updated. (EF different so Anthro went from 109.5 to 90.5 and error on source worksheet)	
	602 INL-I	2011 Ht	2011 Human Powered	Walking and/or Bicycling	ling	278		216.000	230.000	31	BEA data updated. ICP and AMWTP data verified.	
	602 DOE Idal		2011 Personal Owned Vehicles	POV Passenger Car	Gasoline	3,298		216.000	230.000	266.802	266.802 DOE data verified	
	602 DOE Ida		2011 Personal Owned Vehicles	POV SUV or Truck	Gasoline	1,722		216.000	230.000	198.729	198.729 DOE data verified	
	602 DOE Idal		2011 Personal Owned Vehicles	POV SUV or Truck	Diesel	370		216.000	230.000	44.869	44.869 DOE data verified	
	602 DOE Ida		2011 Personal Owned Vehicles	Motorcycle	Gasoline	41		716.000	730.000	1.52/	1.52/ DOE data verified	
	602 DOE Idal		2011 Personal Owned Vehicles	POV Passenger Car	Hybrid	321		216.000	230.000	13.188	DOE data verified. Difference in Anthro SPO Note: Site entered "alternative" (from S5.3 to 13.445 - change to which is not an option, changed to "hybrid".  "hybrid".	<sup>9</sup> SPO Note: Site entered "alternative" which is not an option, changed to "hybrid".

				Groe	Ground Travel Information	nformation					N	Notes
PSO 5	Site# Site	FY Proce	Process Type	Vehicle Type	Fuel Type	Consumption/ Usage	Unit of Measure	Site Number of Commute Days per Year	Default Number of Commute Days per Year	Anthropogenic MtCO <sub>2</sub> e	Additional Information	SPO Notes
NE	602 DOE Idal	2011 Personal Owned Vehicles	ed Vehicles	POV Passenger Car	Diesel	96		000	230.000	9.410	DOE data verified (EF different so Anthro went from 109.5 to 9.41. Also	
EN EN	602 DOE Idal	2011 Human Powered		Walking and/or Bicycling	ling	30		216.000	230.000	,	DOE data verified	
NE	903 INL-S	2011 Personal Owned Vehicles		POV Passenger Car	Gasoline	61,207		192.000	230.000	4,401.896	BEA data updated. CWI and AMWTP data verified	
NE	603 INL-S	2011 Personal Owned Vehicles	ed Vehicles	POV SUV or Truck	Gasoline	28,065		192.000	230.000	2,879.211	BEA data updated. CWI and AMWTP data verified	
Ä	903 INL-S	2011 Personal Owned Vehicles		POV SUV or Truck	Diesel	698'6		192.000	230.000	1,063.477	BEA data updated. CWI and AMWTP data verified	
NE	93 INL-S	2011 Personal Owned Vehicles		Motorcycle	Gasoline	642		192.000	230.000	21.024		
Ħ	903 INL-S	2011 Personal Owned Vehicles	ed Vehicles	POV Passenger Car	Hybrid	1,588		192.000	230.000	57.930	BEA data updated. Difference in Anthro (from 55.3 to 62.725 - change to hybrid. Also error on source	SPO Note: Site entered "alternative" which is not an option, changed to "hybrid".
Ä	603 INL-S	2011 Personal Owned Vehicles	ed Vehicles	POV Passenger Car	Diesel	943		192.000	230.000	81.863	-	
Ä	3 INI 603	along anything 1000		lood ac	odloses	0 131		100 000	000 066	375 000	Also error on source worksheet)	
E E	603 INL-S	2011 Car/Van Pools		Van Pool	Gasoline	18,272		192.000	230.000	468.631	468.631 INL data verified	
NE	93 INL-S	2011 Human Powered	red	Walking and/or Bicycling	ling	158		192.000	230.000		BEA data updated. CWI and AMWTP	
											BEA, CWI and AMWTP data entered.	
NE	602 INL-I	2012 Personal Owned Vehicles	ned Vehicles	POV Passenger Car	Gasoline	20,959		212.000	230.000	1,664.346	Updated number of commute days per year based on commuter survey	
											responses.	
NE	602 INL-I	2012 Personal Owned Vehicles	red Vehicles	POV Passenger Car	Diesel	278		212.000	230.000	26.634	26.634 BEA and CWI data entered	
NE	602 INL-I	2012 Personal Owned Vehicles		POV SUV or Truck	Gasoline	12,796		212.000	230.000	1,449.443	1,449.443 BEA, CWI and AMWTP data entered	
NE	602 INL-I	2012 Personal Owned Vehicles		POV SUV or Truck	Diesel	1,227		212.000	230.000	146.026	146.026 BEA, CWI and AMWTP data entered	
NE	602 INL-I	2012 Personal Owned Vehicles		Motorcycle	Gasoline	497		212.000	230.000	17.967	17.967 BEA, CWI and AMWTP data entered	
NE	602 INL-I	2012 Personal Owned Vehicles		POV Passenger Car	Hybrid	1,317		212.000	230.000	53.057	53.057 BEA and CWI data entered	
E I	602 INL-I	2012 Car/Van Pools	s	Car Pool	Gasoline	149		212.000	230.000	5.908	5.908 CWI data entered	
NE	602 INL-I	2012 Car/Van Pools	va .	Van Pool	Gasoline	79		212.000	230.000	1.910	1.910 CWI data entered	
N	602 INL-I	2012 Human Powered	red	Walking and/or Bicycling	ling	309		212.000	230.000	0	BEA and CWI data entered	
E E	603 INL-S	2012 Personal Owned Vehicles	ned Vehicles	POV Passenger Car	Gasoline	72,666		188.000	230.000	5,117.121	BEA, CWI and AMWTP data entered. Updated number of commute days per year based on commuter survey resonnes.	
NE	903 INL-S	2012 Personal Owned Vehicles	ed Vehicles	POV Passenger Car	Diesel	1,653		188.000	230.000	140.515	140.515 BEA and CWI data entered	
NE	S-7NI E09	2012 Personal Owned Vehicles	ed Vehicles	POV SUV or Truck	Gasoline	30,667		188.000	230.000	3,080.597	3,080.597 BEA, CWI and AIWWTP data entered	
NE	603 INL-S	2012 Personal Owned Vehicles	ed Vehicles	POV SUV or Truck	Diesel	4,287		188.000	230.000	452.341	452.341 BEA, CWI and AMWTP data entered	
NE	903 INL-S	2012 Personal Owned Vehicles		Motorcycle	Gasoline	602		188.000	230.000	19.316	19.316 BEA, CWI and AMWTP data entered	
NE	<b>903 INI-S</b>	2012 Personal Owned Vehicles		POV Passenger Car	Hybrid	1,573		188.000	230.000	56.174	56.174 BEA and CWI data entered	
NE	903 INL-S	2012 Car/Van Pools	ÇO.	Car Pool	Gasoline	27,324		188.000	230.000	962.075	962.075 CWI data entered	
NE	903 INL-S	2012 Car/Van Pools	(n	Car Pool	Gasoline	1,372		188.000	230.000	48.313	48.313 CWI data entered	
NE	993 INI-S	2012 Car/Van Pools		Van Pool	Gasoline	9,761		188.000	230.000	245.143	245.143 CWI and AMWTP data entered	
NE	803 INL-S	2012 Car/Van Pools		Van Pool	Gasoline	5,250		188.000	230.000	131.835	131.835 CWI data entered	
NE	803 INL-S	2012 Car/Van Pools		Van Pool	Gasoline	257		188.000	230.000	24.026	24.026 CWI data entered	
NE	603 INL-S	2012 Human Powered	red	Walking and/or Bicycling	ling	184		188.000	230.000	c	BEA and CWI data entered	
NE	602 DOE Idal			POV Passenger Car	Gasoline	2,720		212.000	230.000	216.018	216.018 DOE data entered	
NE	602 DOE Idal	2012 Personal Owned Vehicles	ed Vehicles	POV SUV or Truck	Gasoline	1,420		212.000	230.000	160.878	160.878 DOE data entered	

Notes	SPO Notes					
NG	Additional Information	1.912 DOE data entered	8.207 DOE data entered	30.262 DOE data entered	11.859 DOE data entered	- DOE data entered
	Site Number Default Anthropogenic Ocommute Number of Anthropogenic Days per Commute MtCO <sub>2</sub> e Year Days per Year	1.912	8.207	30.262	11.859	t
	Default Number of Commute Davs per Year	230.000	230.000	230.000	230.000	230.000
	Site Number Default of Commute Days per Commute Year Days per Ye.	212.000	212.000	212.000	212.000	212.000
	Unit of Measure					
Ground Travel Information	Consumption/ Usage	53	86	254	294	49
und Travel	Fuel Type	Gasoline	Diesel	Diesel	Hybrid	cling
Gro	Vehicle Type Fuel Type Consumption/ Usage	Motorcycle	POV Passenger Car Diesel	POV SUV or Truck Diesel	POV Passenger Car Hybrid	Walking and/or Bicycling
	Process Type	02 DOE Idal 2012 Personal Owned Vehicles	02 DOE Idal 2012 Personal Owned Vehicles	32 DOE Idal 2012 Personal Owned Vehicles	02 DOE Idal 2012 Personal Owned Vehicles	32 DOE Idal 2012 Human Powered
	ξ	al 201.	al 201.	al 201.	al 201.	al 201.
	PSO Site# Site FY	2 DOE Ide	2 DOE Ide	2 DOE Ide	2 DOE Ide	2 DOE Ide
	Site #	09	09	09	09	09
	PSC	NE	NE	NE	NE	NE

# Fugitive Emissions: On-site Landfills and Municipal Solid Waste Facilities (Domestic Only)

Methodology

Current FY Requirement(s): DOE 0.456.1, E.O. 13514

Instructions: This is an optional tab for FY 2012 GHG estimates of on-site landfill/numicipal solid waste emissions and GHG goal performance. Enter information uploaded or to be uploaded into PPTRS for FY 2012 and select "Current FY" from the dropdown line in cell Y4.. If the information is not enter than select "Level select "FY" and the historical data is updated there is not a please address SPO requests on historical data. If historical data is updated with the cell and man the "Additional Information" column. Finally, sites may elect to provide a short description of the methodology used for gathering this information.

All data reviewed, updated, and correct for FY2013 CEDR by Kim Frerichs 111/19/2012.



Notes		SPO Notes			Changed site to 603, since all reportable SPO Request. Do not have raw data. \$5,962.950 onsite bandfills are only Please provide original data, if at 603 Updated BEA available	Changed site to 603.  Since all reportable SPO Request. Do not have raw data.  5,785.290 onsite bandlils are only Please provide original data, if at 603 Updated BEA available	
		Additional Information		Changed site to 603, 5,702.130 since all reportable onsite landfills are only at 603 at 603	Changed site to 603, since all reportable SPO Required Indfills are only Please pro at 603. Updated BEA available	Changed site to 603, since all reportable SPO Require all reportable norsite landfills are only Please programmed at 603. Updated BEA available	INL raw data input for FY12 (DOE-ID = 513.3 short tons, DOE-INE 150.25 short tons)
		Anthropogenic MtCO <sub>2</sub> e		5,702.130	5,962.950		5,617.080
		Biogenic MtCO <sub>2</sub> e		910.868	952.563	924.178	897.230
		Combustion Oxidation Factor (CO2 Biogenic)	Default	%66	%66	%66	%66
			t Site	10%	10%	10%	10%
		Methotropic Bacteria Oxidation Factor (CH4)	. Default			501.55	
		Venting Loss (CH4)   Methotropic Bacteria	Default Site	1%	1%	1%	1%
			Site	75%	75%	75%	75%
		Landfill Gas Collection System Efficiency (CH4)	Default	7	7	7	7
formation		Release C	Default Site	20%	20%	20%	20%
On-Site Landfill Information	ı	Percentage Incontrolled Re (CH4)	Site De	100%	100%	100%	100%
On-Site		Percentage Percentage Landfill Gas Uncontrolled Release Uncontrolled Release Collection System (CCO Biogenic) (CH4) Efficiency (CH4)	Default	100%	100%	100%	100%
		Methane Unc (MT (	Site	301.700	315.500	306.100	297.200
		Carbon dioxide Methane (biogenic) (MT (MT Megagram) Megagram)		827.900	865.800	840.000	815.500
		Close (b	(Year)	2025	2025	2025	2025
	Ī		(Year)	1984	1984	1984	1984
		Waste Disposed Open On-site (Short Date	1 ons)	709	827	805	664
		FY		2011	2008	2010	2012
		Site		903 INL-S	903 INL-S	903 INL-S	603 INL-S
		Site #		:09	90:	90:	909
		PSO		N	Ä	ä	N

# Fugitive Emissions: Contracted/Off-site Landfills and Municipal Solid Waste Facilities (Domestic Only)

Requirement(s): DOE O 436.1, E.O. 13514

Instruction: This is a copional to be FY 2012 OFFO setuments of off-site hardfulls maintipal solid wash evaluate and GFO goal performance. Eater information uploaded or to be uploated into PFTS for FY 2012 and select "Carlot to the charge in the "Maintional Information" returners. Also, pieces address SFO responses on historical data. It instructed data is upstact pieces by sever to ingligate the cell and note the charge in the "Maintional Information" column. Finally, sites may be absorbed to get forming the address of registering that address of registering that address of the reformation of t

Notes	SPO Notes		SPO Request. Please provide separate 2010 data if available. Appears to be copy of 2011. Do not have raw data.	SPO Request: Please provide actual data, if available. Do not have raw data.	SPO Request: Please provide separate 2008 data if available. Appears to be copy of 2011. Do not have raw data	
	* Additional Information	Info from "Santation opportunities of partners Repair and Repair of PT13 step." No Landrill gas county landrill, also again the county landrill, and partners and No Landrill as collection loss. The county landrill and against child with a conference the season of the county landrill, and the	859.981 Entered raw data.	Why was MFC reporting contracted MSW? Could not find source of this data. Removed data.	1,067.980 Entered BEA raw data.	767.676 BEAraw data entered.
	Anthropogenic MtCO <sub>2</sub> e	870,423				
	Bingenir MrCO <sub>2</sub> e	139.314	137.642		170.933	122.869
	Comb ustion Oxidation Factor (CO2 Biogenic) Site Default	%O 66	%0°66	%0.66	%O'66	%0.66
	Methotropie Bat teria Oxidation Factor (CH4) Sile Default Si	30,0%	10.0%	10.0%	10.0%	10.0%
	Venting Loss (CH4) C	1.0%	1.0%	1.0%	1.0%	1.0%
	Landfill Gas Collection System Efficiency (CH4) Site Default S	15.0%	75.0%	75.0%	75.0%	75.0%
		%0.05	50.0%	50.0%	20.08	20.0%
	Percentage Uncontrolled Release (CH4 Site Default	100.0% 100.0%	100,0% 100,0%	.0	6 100.0%	100.0% 100.0%
	Percentage Uncontrolled Release (CO2 Biogenic) Site Default	100.09	100.09	100.0%	100.0%	100.09
mation	Methane (MT Megagram)	46.054	45.502	Fig.	56.507	40.618
Contracted/Off-Site Landfill Information	Carbon dioxide (biogenic) (MT 1	126.649	125.130	li li	155.394	111.699
d/Off-Site I	Carbon Dioxide Molecular Weight Conversion	1.667	3,667	3.667	3.667	3.667
Contracte	Methane Molecular Weight Conversion	1.333	1.333	1.333	1.333	1.333
	Methane % of Landfill Gas (%)	%O OS	%0°05	%0 O5	%0°05	%0.05
	Methane Correction I Factor S	1.0	01	1.0	10	10
	DOC Anaerobir Methane Methane % of Digesthility (%)   Correction Landfill Gas (%)   Factor Site   Default	%60'05	20.0%	%0.0%	\$0.0%	20:09%
	Mass of Shill Degradable Organia Water Disposed Carbon (Mergeram DOC Ansarmbis Merlane Water Disposed Carbon (Mergeram Degradality (%) Correction (Mergeram) Sine   Definit State   Definit Farior	0.203	0.203	0.203	0.203	0.203
	Mass of Solid II Waste Disposed Off site (Megagram)	680.603	672.438	at.	835.077	600.263
	Mass of Solid Waste Disposed V Off. site (Short Tons)	750.240	741.240		920.520	661.680
	E	2011	2010	2010	3008	2012
	Site	602 INL-1	602 INL-1	604 MFC	602 INL-I	602 INL-1
	PSO Sile#		25			8

### Fleet Fuel (FAST Data)

March   Perform   Perfor	Fuel Cruste         Fuel Name         Fuel Name         Fuel Name         Fuel Name         Fuel Name         Plant Pathename         Abhresiane         Lecentries         Abhresiane         Carabhame         Abhresiane         Carabhame         Carabhame <th>  Continue   Continue</th>	Continue
State   Stat	Final Course         Final Construction         Final Constr	Agency   EPAACT   E
60 Oli 100 Control In High Market I Alexander All 100 Control In High Market I Alexander Al	Ciscoline         Ciscoline         No.         11155         11155 galloris x 3 1           Ciscoline         Ciscoline         No.         No.         11155         11155 galloris x 3 1           Ciscoline         Dist.         NS         Ciefe         No.         57.22         52.23	BEATL-Cove View No. 100 PEATL-Cove View No. 100 PEATL-
10.00   10.0	OLIGE         OLIVIDA 30000         NA         373.39         1.4482 galloris x 31           OLIGE         OLIVIDA 30000         NA         EPER         No         532.39         1.4482 galloris x 31           OLIGE         OLIVIDA 3000         NA         EPER         No         572.29         542.29         542.29         4.488 galloris x 31           OLIGE         OLIVIDA 3000         NA         Nome         No         7.20         542.29	BAMT-Core Ves BA
10.00   10.0	Casaline         CASA         NA         EFER         NA         679.22         442.23         642.23	ERACI-CORN' 185 NO ERACI-CORN' 1
10.0 Bits to Descript ot the National Industrian-field   7000 EMPG*Control   7000 EM	Coolesia         DSIA         None         Non         Non         Coolesia         SSS         Coolesia         SSS         SSS         Coolesia         SSS         SSS         Coolesia         SSS         Coolesia         SSS         Coolesia         SSS         Coolesia         Non         Non         Non         1135         1148         2500044         SSS         SSS         Cooles         Non         Non <t< td=""><td>BADIT. CORN '98 '98 '98 '98 '98 '98 '98 '98 '98 '98</td></t<>	BADIT. CORN '98 '98 '98 '98 '98 '98 '98 '98 '98 '98
10.0 Third College C	Gaseline         DASC         NA         TADOGE         1313CH         LING         1148 gallons           Caseline         DASC         NA         EFRE         NA         1347         1148 gallons           Caseline         DASC         NA         None         NA         1148 gallons         1148 gallons           CAS         LNG         NA         None         NA         3172 gallons         1118 gallons         1118 gallons           CAS         LNG         NA         NA         NA         3172 gallons         1118 gallons         1118 gallons           Caseline         CAS         NS         ERR         NA         31732         3172 gallons         1118 gallon	BEAMT-CORE '85 No. 19
900 Changed Date of Agricultural A	Obseller         CARS         NA         FER         NA         1565         1505         1506	BACH CLORN YES NO BEACH CLORN YES YES SEAL CLORN YES NO SEAL
0.00         Columnia (Line) Control (Line) Contr	Order         Nome         No         1565         1565 gallones           Order         Order         No         1565         1565 gallones           LPG         NS         Nome         No         34103         556 gallones           LPG         NS         ERR         No         34103         551 gallones gallones           Casaline         CAS         NS         ERR         No         35224         3122 gallones           Deselle         DSL         NS         ERR         No         53234         312 gallones           Deselle         DSL         NS         ERR         NO         33322         3323 gallones           Deselle         DSL         NS         No         NS         432         4324 gallones           Deselle         DSL         NS         No         NS         4324 gallones         3133 gallones           DNG         CAS         NS         No         NS         4324 gallones         3133 gallones           DNG         CAS         NS         N	BAMI-Core Ves BAMI-CORE
OCI CONTINUE DELIBERATION DELIBERATION AND ADMINISTRATION OF	LVG         NNO SAGON         None         NA         38877         SIGST gallons gr. 31           LVG         NNO SAGON         NNO NONE         NO         34103         SIGST gallons gr. 31           Deel         DSA         NS         NNOR         NO         3552A         3132 gallons gr. 31           Deel         DSA         NS         ERR         NO         5532A         3132 gallons gr. 31           Deel         DSA         NS         ERR         NO         5532A         3132 gallons gr. 31           Gashine         GAS         NS         ERR         NO         5532A         3132 gallons gr. 31           Gostile         GAS         NS         ERR         NO         5532A         3132 gallons gr. 31           ChG         GAS         NS         NO         NO         3132 gallons gr. 31         3132 gallons gr. 31           ChG         GAS         NS         NO         NO         3132 gallons gr. 31         3132 gallons gr. 31           ChG         GAS         NS         NO         NO         3132 gallons gr. 31         3100 gallons gr. 31           ChG         GAS         NS         NO         NO         3132 gallons gr. 31         3132 gallons gr. 31 <td>BACT-CORN THE BACT-CORN THE BA</td>	BACT-CORN THE BA
Coltrol Colt	LONG         CHOIN PROMISE         NOTION PROMISE <td>THE STAND TO SEE THAT TO SEE T</td>	THE STAND TO SEE THAT TO SEE T
600 Into Opening Into National London (Marcial London)         700 Intelligence (Marcial London)         700 Intellige	Concient         DSI,         NA         55584         31580 pulsors           Concient         OSA         NA         £ER         NA         6223 guilors           Coseline         CAS         NS         £ER         NA         6223 guilors           Coseline         CAS         NS         £ER         NA         6223 guilors           Coseline         CAS         NS         None         NA         62378         552525 guilors           Coseline         CAS         NS         None         NA         62378         552525 guilors           Coseline         CAS         NS         None         NA         1128         1123 guilors           COS         CAS         NA         None         NA         1128         1123 guilors           COS         CAS         NA         None         NA         73         1424 guilors           COS         CAS         NA         NA         NA         73         73         73           COS         CAS         NA         NA         NA         73         73         73         73         73         73         73         73         73         73         73         73	BEAMT-Core Vis.  BEAMT-
929 station Desired links Ministral Labertowing RA         700 pt. PMC, Convery         700 pt. PMC, Conv	Gastellier         GAS         NA         EFR         NA         G1958         G1928 gulores           Gastellier         GAS         NA         EFR         NA         G19273         G19273 gulores           Gastellier         GAS         NA         EFR         NA         G19273         G19273 gulores           Gastellier         GAS         NA         EVER         NA         G13382         G50273 gulores           Chois         CAS         NA         None         NA         G1238         G50273 gulores           Chois         CAS         NA         None         NA         G1238         G1502 gulores           Chois         NA         None         NA         C2756         G10273 gulores         G1           Choi         NA         None         NA         C2756         G10273 gulores         G1           Choi         NA         NA         C2784         G4666 gulores </td <td>BAMITICORN'SS NO BAMITICORN'SS NO BAMITI</td>	BAMITICORN'SS NO BAMITI
902 time by the properties in the National Laberancy-life A         700 time by the properties in the National Laberancy-life A         700 time by time by time by the properties and time by time by the properties in the National Laberancy-life A         700 time by t	Obesilne OSA, NS NS IN E NO O 6723 60073 60072 gallons: Discosine OSA NS	BADITIONE '889 NO BADITIONE '8
900 Electron Desired Intervenential Leadersheight A 2001 Electrone Transcription of the control of the	Gastiller         GAS         NA         None         NA         67878181         55726 gallones           Gastiller         GAS         NA         None         NA         51357 gallones         53152 gallones           Gastiller         GAS         NS         None         NA         1185         11353 gallones           Cloid         GAS         NS         None         NA         1185         11032 gallones           Cloid         GAS         NS         None         NA         1185         110324 gallones           Cloid         GAS         NS         None         NA         123         1242 gallones           Cloid         GAS         NS         None         NA         2735         2785         61005 gallones           Cloid         CMS         NS         NS         NS         NS         2725         2786 gallones           Gastline         GAS         NS         NS         NS         NS         2726 gallones           Gastline         GAS         NS         NS         NS         2726 gallones           Gastline         GAS         NS         NS         NS         2726 gallones           Gastline         CAS	EMATICADE VES PER EMATICADE VES EMATICADE VES EMATICADE VES PER EM
900 CHANCE OPERATOR CONTROLL CONFORM         700 CHANCE OPERATOR CONFORM	Desert III PART NO.         NOTION PROFESS NO.         NOTION	THE STANT LACKE TO SERVE THE STANT LACKE THE S
80 Classic Michael Departic Michael Control Michael Control Control Control Michael Control Control Control Michael Control Control Control Michael Control Control Control Michael Control Control Michael Control Control Michael Con	Opicione (1878)         Nome         Nome         Nome         1,64.4         1,64	BEALT.Come '85 Western State BEALT.Come '85 Western State BEALT.Come '85 No Depart.Come '
SIGN TIME OPERATION SANOTH LIGHON NATIONAL LIGHON NATIO	DIGST         CNGST         CNGST <th< td=""><td>PEMATICONE '85 NO PEMATICONE '</td></th<>	PEMATICONE '85 NO PEMATICONE '
600 High Operation Mannel Laboratory-EERA         2002 EARTHCOARM'S NO. ARTHRUMORY DISC. DAYS NOT ANY ARTHRUMORY DISC. DAYS NOT ARTHRUMO	DOG         CNAS SOR NA         None         NA         2735A         1312A         1313A           LNG         LNG         NA         None         NA         2731A         13284         13284         1313A	BAMITICORE '88 NO BAMITICORE '
602 timbo Detents of nink Motional Laboratory-BEAR         7000 PRACT/Cone Way         No.         Attentione Wilds         No.         No.         Proceedings         No.         No.         Attentione Detents of nink Motional Laboratory-BEAR         7000 PRACT/Cone Way         No.         Attentione Detents of nink Motional Laboratory-BEAR         7000 PRACT/Cone Way         No.         Proceedings         No.         No.         No.         7000 PRACT/Cone Way           8020 Link Motional Laboratory-BEAR         2000 PRACT/Cone Way         No.         Previous Detents of nink Motional Laboratory-BEAR         2000 PRACT/Cone Way         No.         Previous Detents of nink Motional Laboratory-BEAR         2000 PRACT/Cone Way         No.         Previous Detents of nink Motional Laboratory-BEAR         2000 PRACT/Cone Way         No.         Previous Detents of nink Motional Laboratory-BEAR         2000 PRACT/Cone Way         No.         Previous Detents of nink Motional Laboratory-BEAR         2000 PRACT/Cone Way         No.         Attentional Detents of nink Motional Laboratory-BEAR         2000 PRACT/Cone Way         No.         Attentional Detents of nink Motional Laboratory-BEAR         2000 PRACT/Cone Way         No.         Attentional Detents of nink Motional Laboratory-BEAR         2000 PRACT/Cone Way         No.         Attentional Detents of nink Motional Laboratory-BEAR         2000 PRACT/Cone Way         No.         Attentional Detents of nink Motional Laboratory-BEAR         2000 PRACT/Cone Way	LNG         NA         None         NA         27315         4.138 gallons @ 1.           LNG         LNG         NA         None         173         3.2 gallons @ 1.           Gestiller         GAS         NS         LER         NO         37373         2.5 gallons @ 1.           Gestiller         GAS         NS         LER         NO         37392         2.5 gallons @ 1.           Gestiller         GAS         NS         LER         NO         37394         2.5 gallons @ 1.           Gestiller         GAS         NS         LE         NO         37304         2.5 gallons & 1.           Gestiller         GAS         NS         LE         NO         37304         2.5 gallons & 1.           Gestiller         GAS         NS         NS         NS         NS         2.5 gallons & 1.           Gestiller         GAS         NS         NS         NS         3.2 gallons & 1.         3.5 gallons & 1.           ChG         CAS         DI         NS         NS         NS         3.5 gallons & 1.         3.5 gallons & 1.           ChG         CAS         DI         NS         NS         NS         3.2 gallons & 1.         3.5 gallons & 1.	BADAT-CORP VES NO BEADAT-CORP VES NO BEATT-CORP VES NO B
9.9. Matter College Col	Desell         DSA         NA         None a         NA         2972A         259 gallons a           Desell         DSA         NA         ERR         No         313 A         259 gallons a           Desell         DSA         NA         ERR         NO         313 A         259 gallons a           Desell         DSA         NA         Nore         NO         313 B         323 gallons a           Desell         DSA         ND         Nore         NO         313 B         323 gallons a           DRS         ND         NORE         NO         313 B         323 gallons a         323 gallons a           DRS         ND         NORE         NO         323 B         323 gallons a         323 gallons a           DRS         ND         NORE         NO         323 B         323 gallons a         33 gallons a           DRS         LNG         NORE         NO         5738 B         323 gallons a         33 gallons a           DRS         LNG         NORE         NO         323 gallons a         33 gallons a           DRS         LN         NORE         NO         323 gallons a         33 gallons a           DRS         LN         NORE <td>EMATICAGE '85 NO EMATICAGE '85 NO EMATIC</td>	EMATICAGE '85 NO EMATIC
65 College Office Against National Laboratory-EAS         700 DRACCONY No. 9         700 DRACCONY	Consoline         CAST         ATT ALL ALL ALL ALL ALL ALL ALL ALL ALL	EGAMICADRE NA NO ESPACIONE NA
692 Charlos Operato cisable Musical Indicators (14.4)         78.2         Perception         Diseal**         58.5         No.         No.         557.039           692 Charlos Operato cisable Musical Indicators (14.4)         200 Sept. (14.4)         200 Sept. (14.4)         18.5         No.         No.         87.0         18.5         No.         No.         87.0         18.5         No.         No.         18.5         No.         18.5         No.	Cooler         No.         No.         No.         S15703         6446646 (pl. 60%)           Cooler         Cooler         No.         No.         152703         646040         64004           Cooler         Cooler         No.         No.         152703         64004         670           Cooler         Cooler         No.         No.         15270         625 gelons st. 3         625 gelons st. 3           Cooler         Cooler         No.         No.         15270         625 gelons st. 3         625 gelons st. 3           Cooler         Cooler         No.         No.         15270         5262 gelons st. 3         625 gelons st. 3           Cooler         Cooler         No.         No.         15270         5262 gelons st. 3         6267 gelons st. 3           Cooler         Do.         No.         No.         1528         5262 gelons st. 3         6267 gelons st. 3           Cooler         Do.         No.         No.         1528         No.         5262 gelons st. 3           Cooler         Do.         No.         No.         1528         No.         5262 gelons st. 3           Cooler         Do.         No.         No.         No.         1528         52	PRACTICORE '85  PRACTICORE '85
692 Chicago Office Afgerine West         Case Depart Coveres         West         Petergierm         Gisable Geograph         None         No         31373           692 Chicago Office Afgerine West         Agrant Mest         2003 Ehand, Covered         West         Petergierm         65 ability Covered         No         75 ability Covered         No         April Covered         No         75 ability Covered         No         April	Designer         DAS.         NA         None         NA         313.0         310.00         100.00           Classifing         DAS.         1D         None         NA         476	BAMITICORE '88 Ves BAMITICORE '88 PENTITICORE
632 Chango Office Agrome West         643 Chango Office Agrome West         644 Chango Office Agrome West         64	Gasolines         GAS         ID         Nonce         No         313         22.3 gallones           ChG         GAS         ID         Nonce         No         4358         455 gallones           ChG         GAS         ID         Nonce         No         1338         255 gallones           ChG         GAS         ID         Nonce         No         13739         2582 gallones         255 gallones           DHS         LNS         ID         ERR         No         37239         2585 gallones         255 gallones           DHS         DN         FR         No         27399         2505 gallones         250 gallones           DHS         ID         KPR         No         33215         258 gallones         250 gallones           DHS         DN         None         No         33215         358 gallones         250 gallones           DHS         ID         None         No         33215         358 gallones         250 gallones           DHS         ID         None         No         33215         358 gallones         258 gallones           DHS         ID         None         No         3584         258 gallones         258 gallones	BADATI-CORE VESS PRES BADATI-CORE VESS B
635 Clitatio Deperato (clink) National Industron-BEAR         2003 B-BART/Cover*         No.         Attentative GASA         ID None         No.         455.44           643 Clitatio Deperato (clink) National Industron-BEAR         2003 B-BART/Cover*         No.         Attentative GAS         100 None         No.         155.34           652 Litatio Deperato (clink) National Industron-BEAR         2003 B-BART/Cover*         No.         Attentative GAS         100 None         No.         No.         157.33           652 Litatio Deperato (clink) National Industron-BEAR         2003 B-BART/Cover*         No.         Attentative GAS         100 None         No.         157.33           652 Litatio Deperato (clink) National Industron-BEAR         2003 B-BART/Cover*         No.         Attentative GAS         100 None         No.         157.33           652 Litatio Deperato (clink) National Industron-BEAR         2003 B-BART/Cover*         No.         Petroleum         Discipling GAS         No.         No.         157.33           652 Litatio Deperato (clink) National Industron-BEAR         2003 B-BART/Cove**         No.         Petroleum         Discipling GAS         No.         No.         No.         157.33           652 Litatio Deperato (clink) National Industron-BEAR         2004 B-BART/Cove**         No.         Petroleum         Discipling GAS         N	Control   Cont	EBACT-Core Ves.  EBACT-Core Ves.  EBACT-Core Ves.  BACT-Core Ves.  BACT-Core Ves.  BACT-Core Ves.  BACT-Core Ves.  PEACT-Core Ves.  EBACT-Core Ves.  BACT-Core Ves.  BACT-Core Ves.  BACT-Core Ves.  BACT-Core Ves.  BACT-Core Ves.  NO.  EBACT-Core Ves.  Res.  Res.  EBACT-Core Ves.  Res.  EBACT-Core Ves.  Res.  Res.  EBACT-Core Ves.  Res.  Res.
way from Observation States Mandreal Laboratory-Bids A         2005 EMAIL-Cover No.         No.         Attentative LDNs         CDNS 2000         10         None         No.         12539           820 I alton Observatio Isalio Mandreal Laboratory-Bids A         2005 EMAIL-Cover No.         No.         Attentative LDNs         105 200         10         None         No.         12739           820 I alton Observatio Isalio Mandreal Laboratory-Bids A         2005 EMAIL-Cover No.         No.         Artentative LDNs         100 SEND         10         None         No.         12739           820 I alton Observatio Isalio Mandreal Laboratory-Bid A         2005 EMAIL-Cover No.         No.         Percelorum Gastelle EAS         10         None         No.         97314           820 I alton Observatio Isalio Mandreal Laboratory-Bid A         2005 EMAIL-Cover No.         No.         Percelorum Gastelle EAS         10         None         No.         97314           820 I alton Observatio Isalio Mandreal Laboratory-Bid A         2005 EMAIL-Cover No.         No.         Percelorum Gastelle EAS         10         None         No.         97314           820 I alton Observatio Isalio Mandreal Laboratory-Bid A         2005 EMAIL-Cover No.         No.         Artenative Gastello Mandreal Laboratory-Bid A         2004 EMAIL-Cover No.         No.         Artenative Gastello Mandreal Laboratory-Bid	UNG         LNG         None         None         513944         813542         8135444         8135444         8135444         8135444         81354444         81354444         81354444         81354444         81354444         813	EARLI-CORNERS NO EARLI-
6202 I dallo Diperatio I dallo National I Abstractory-Bilds         2005 E PAGE-Cover Str.         No.         No.         No.         No.         173739           6202 I dallo Objectatio I dallo National I Abstractory-Bilds         2007 E PAGE-Cover Str.         No.         No.         100 C SERVE         No.         1073739           620 I dallo Objectatio I dallo National I Abstractory-Bilds         2007 E PAGE-Cover Str.         No.         Perceivation         1056.0         10         E/ER         No.         57,839           620 I dallo Objectatio I dallo National I Abstractory-Bilds         2007 E PAGE-Cover Str.         No.         Perceivation         1056.0         10         E/ER         No.         57,839           820 I data Objectatio I dallo National I Abstractory-Bilds         2008 E PAGE-Cover Str.         No.         Perceivation         1056.0         10         No.         No.         57,833           832 I classo Officer A Aggione Wastra         2008 E PAGE-Cover Str.         No.         Perceivation         1056.0         10         No.         57,834           832 I classo Officer A Aggione Wastraction Laboratory-Bilds         2008 E PAGE-Cover Str.         No.         Archielanto Desiration Callo National I Abstractory-Bilds         2008 E PAGE-Cover Str.         No.         No.         No.         57,834           832 I dallo Objectat	Note	EMATCAGE 188 NO EMATCAGE 188 N
602 Table Observation fields between peak         700 EPACT-Core Ves         No.         Perfection of the Secretary BEA         No.         No.         STS155           652 Table Observation laboratory-BEA         2005 EPACT-Core Ves         No.         Perfection of Secretary BEA         DATE DEACT-Core Ves         No.         Perfection of Secretary BEA         No.         No.         ASS           652 Table Observation Laboratory-BEA         2006 EPACT-Core Ves         No.         Perfection of Secretary BEA         No.         No.         No.         ASS           652 Table Observation Laboratory-BEA         2006 EPACT-Core Ves         No.         Perfection of Secretary BEA         No.         No.         No.         ASS           652 Table Observation Laboratory-BEA         2006 EPACT-Core Ves         No.         Perfection of Secretary BEA         No.         No.         No.         ASS           652 Table Observation Laboratory-BEA         2006 EPACT-Core Ves         No.         Perfection of Secretary BEA         No.         No.         No.         ASS	Condition         DSI.         D         ERR         NA         259-09         2000000-200000-20000-20000-20000-20000-20000-20000-20000-20000-20000-20000-20000-20000-20000-20000-20000-20000-20000-200000-20000-20000-2000000	BADIL-Cone Ves  NO  BADIL-Cone Ves  NO  BADIL-Cone Ves  NO  BADIL-Cone Ves  BA
6.02 Infold Departed in Glave Markon II Liberatory-BEA         2003 EPAIT-Core Ves         Ves         Pertoleum         GAS Infol Departed in Glave Markon II Liberatory-BEA         2003 EPAIT-Core Ves         Ves         Pertoleum         GAS Infol Departed in Glave Markon II Liberatory-BEA         2003 EPAIT-Core Ves         Ves         Pertoleum         GAS In Info Departed in Glave Markon II Liberatory-BEA         2003 EPAIT-Core Ves         Ves         Pertoleum         GAS In Info Departed in Glave Markon II Liberatory-BEA         2003 EPAIT-Core Ves         Ves         Pertoleum         GAS In Info Departed in Glave Markon II Liberatory-BEA         2004 EPAIT-Core Ves         No.         Pertoleum         GAS In Info Departed in Glave Markon II Liberatory-BEA         2004 EPAIT-Core Ves         No.         Pertoleum         GAS In Info Departed in Glave Markon II Liberatory-BEA         2004 EPAIT-Core Ves         No.         Attenuabre Departed in Glave Markon II Liberatory-BEA         2004 EPAIT-Core Ves         No.         Attenuabre Departed in Glave Markon II Liberatory-BEA         2004 EPAIT-Core Ves         No.         Attenuabre Departed in Glave Markon II Liberatory-BEA         2004 EPAIT-Core Ves         No.         Pertoleum         Departed Departed In Glave Markon II Liberatory-BEA         2004 EPAIT-Core Ves         No.         Pertoleum         Departed Departed Departed Departed In Glave Markon II Liberatory-BEA         2004 EPAIT-Core Ves         No.         Pertoleum         Departed Departed Departed Departed Departed Departed Glav	CARRENTER         CARRENTER         FERR         NO         375.25.25.89         38.00 (197.8)           CARRENTER         DASI         1.0         None         NO         38.12.55         38.26 (107.8)           CARRENTER         DASI         1.0         None         NO         38.12.55         38.26 (107.8)           DERSENT         DASI         1.0         None         NO         38.12.55         38.12.55 (201.8)           DERSENT         DASI         1.0         None         NO         38.25         34.25 (201.8)           BIO-CHESE         DASI         1.0         None         NO         7.23         4.09 (201.8)           LING         LID         None         NO         7.24         2.23 (201.8)         1.0           LING         LID         None         NO         7.24         2.53 (201.8)         1.0           DERSENT         LID         NO         NO         7.24         2.53 (201.8)         1.0           DERSENT         LID         NO         NO         2.54 (201.8)         2.54 (201.8)         2.54 (201.8)           DERSENT         LID         NO         NO         2.54 (201.8)         2.55 (201.8)         2.55 (201.8)	PRATICOR® 188  PRATIC
602 clain Oberatio (allo Mational Liberatory-BEA         2005 ENALT-Cove Ves         Ves         Petroleum         Disposine         DATION         None         No         571588           603 clain Oberatio (allo Mational Liberatory-BEA         2006 ENALT-Cove Ves         Yes         Petroleum         DATION         No         No         343158           693 clain Oberatio (allo Mational Liberatory-BEA         2004 ENALT-Cove Ves         Yes         Petroleum         DATION         No         No         No         343158           693 clain Oberatio (allo Mational Liberatory-BEA         2004 ENALT-Cove Ves         Yes         Petroleum         DATION         No         No         No         33554           693 clain Oberatio (allo Mational Liberatory-BEA         2004 ENALT-Cove Ves         No         Attenuatory         DATION         No         No         No         No         33554           693 clain Oberatio (allo Mational Liberatory-BEA         2004 ENALT-Cove Ves         No         Attenuatory         DATION         No         No         No         33554           693 clain Oberatio (allo Mational Liberatory-BEA         2004 ENALT-Cove Ves         No         Attenuatory         DATION         No         No         Attenuatory         No         Attenuatory         DATION         No         No	Gasolines         GAS         ID         None         No         571989         4382165         438018	EBACT-Cove Ves FRACT-Cove Ves FRACT-Cove Ves FRACT-Cove Ves FRACT-Cove Ves FRACT-Cove Ves FRACT-Cove Ves No FRACT-Cove Ves FRACT-
693 Unique Optical Aggional Machinel Individuol-gibble         2003 EMACL-Cover No.         Per opticulum Gibble         63.5         10         None         No.         43.9           693 Unique Office Aggional West         2004 EMACL-Cover No.         Petroleum Gibble         63.5         10         None         No.         73.24           693 Unique Office Aggional West         2004 EMACL-Cover No.         Afternative Gibble         20.5         10         None         No.         73.24           602 clain Operatio Individuolal Laboratory-BEA         2004 EMACL-Cover No.         Afternative Gibble         10.6         10.0         None         No.         73.24           602 clain Operatio Individuolal Laboratory-BEA         2004 EMACL-Cover No.         Afternative Gibble         10.6         None         No.         73.24           602 clain Operatio Individuolal Laboratory-BEA         2004 EMACL-Cover No.         Afternative Gibble         10.6         None         No.         70.5           602 clain Operatio Individuolal Laboratory-BEA         2004 EMACL-Cover No.         Afternative Gibble         10.6         10.0         None         No.         20.24           602 clain Operatio Individuolal Laboratory-BEA         2004 EMACL-Cover No.         No.         Precident         10.6         10.0         None         No.	Description         DATE of the property of th	ERMIT-CORN'ESS PRES ERMIT-CORN'ESS PRES ERMIT-CORN'ESS PRES ERMIT-CORN'ESS PRES ERMIT-CORN'ESS NO ERMIT-CORN'ESS PRES ERMIT-CORN'ESS PRES ERMIT-CORN'ESS PRES ERMIT-CORN'ESS PRES ERMIT-CORN'ESS PRES ERMIT-CORN'ESS NO ERMIT-CORN'E
632 Clarke Agronn Water         632 Clarke Agr	Booklein         62A         1D         None         NA         223         252 galdions           Booklein         62A         1D         None         Non         1524.4         2627 galdions           DNG         1D         None         Non         1584.4         2528.4         2528.2           LAG         1D         None         No         1584.4         2528.2         252.0           DNS         1D         None         No         452.1         2528.2         252.0           DNS         1D         None         No         451.1         420.2         252.0           DNS         1D         None         No         451.1         420.2         252.0           DNS         1D         None         No         5585.4         2585.2         250.0           DNS         1D         None         No         551.0         15.2         250.0           DNS         1D         None         No         251.0         250.0         250.0           DNS         1D         None         No         240.0         251.0         250.0           DNS         1D         None         No         240.0         251.2 </td <td>PENCT-CORE VEST PRESIDENT CORE VEST PRESIDENT CORE VEST NO ENATIONE VEST N</td>	PENCT-CORE VEST PRESIDENT CORE VEST PRESIDENT CORE VEST NO ENATIONE VEST N
620 data Operator of also Marcin of the Marcin of Also Marcin of Sept and Developed Broader of Sept and	Discriment   Dis	PENATICOR® 188  NO PENATICOR® 18
650 fallon Operatio falso National Laboratory-BEA         2004 ENAT-Cove Ves         No.         Alternative Ordinal Laboratory-BEA         2004 ENAT-Cove Ves         No.         Perforiem         Dises         D.D.         No.         No.         350 FBA           6201 data Operatio falso Nucloual Laboratory-BEA         2004 ENAT-Cove Ves         No.         Perforem         Dises         D.D.         D.D.         No.         4517           6201 data Operatio falso Nucloual Laboratory-BEA         2004 ENAT-Cove Ves         No.         Perforem         Dises         D.D.         No.         No.         4517           6201 data Operatio falso Nucloual Laboratory-BEA         2004 ENAT-Cove Ves         No.         Perforem         DSS-ID         No.         No.         254970           6201 data Operatio falso Nucloual Laboratory-BEA         2006 ENAT-Cove Ves         No.         Perforem         DSS-ID         No.         No.         254970           6201 data Operatio falso Nucloual Laboratory-BEA         2006 ENAT-Cove Ves         No.         Afternative ES         DSS-ID         No.         No.         A704	UNG   UNG   ID   None   No   18814   23825 Indirecte Cu     UNG   UNG   ID   None   No   18814   23825 Indirecte Cu     UNG   ID   None   No   0.0     UNG   ID   None   No   0.0     UNG   ID   ER   No   4911   4282 galons     UNG   ID   None   No   5457   4572 galons     UNG   ID   None   No   5457   5452 galons     UNG   ID   None   No   5459   5452 galons     UNG   ID   ID   ID   ID   ID   5459   5452 galons     UNG   ID   ID   ID   ID   ID   ID   ID     UNG   ID   ID   ID   ID   ID   ID   ID   I	EBACT-Cover Ves.  BACT-Cover Ves.  PEBACT-Cover Ves.  BACT-Cover Ves.  NO.
6.02 claim Observation States Marketin Laboratory-Biology         2.000 EPACL-Code No.         No.         Percelosium Diesel         EAR         1.0         Notes         NO         2.000 EPACL-Code No.           6.02 claim Observation States Mandroval Laboratory-Biology Academy States A control Residual Control-Biology Academy States A control Residual Control-Biology States A control Residual Control Residual Control-Biology States A control Residual Control	Dieter   Diet   Compare   Note   Note   Compare   Dieter   Diet   Compare   Note   Compare   Dieter   Diet   Dieter   Diet   Dieter   Diet   Dieter   Diet   Dieter	ERACI-CORP ISS NO
6201 Elabor Material Laboratory-Elabor Material Laboratory-Elaboratory Elaboratory Elaborat	Check   Dist.   Dist.   E. F.R.   No.   4513   4.128 gallons	EPACT-CORE VES
620 table Operatio laboratory-BEA         2004 PAPICT.Cover Vis.         No.         Petroleum         GASA IND         IE         No.         4157           620 table Operatio laboratory-BEA         2004 PAPICT.Cove Vis.         Vis.         Petroleum         DIAB IN IND         IN None         No.         28857           620 table Operatio laboratory-BEA         2004 PAPICT.Cove Vis.         Vis.         Petroleum         DIAB IN IND         None         No.         28857           620 table Operatio laboratory-BEA         2004 PAPICT.Cove Vis.         Vis.         Petroleum         DIAB IN IN IND         None         No.         28937           620 table Operatio laboratory-BEA         2004 PAPICT.Cove Vis.         Vis.         Petroleum         DIAB IN IND         None         No.         28937           620 table Operatio laboratory-BEA         2004 PAPICT.Cove Vis.         No.         Ademanday BEA IN IND         No.         Annual No.         No.         Annual No.           620 table Operatio laboratory-BEA         2006 PAPICT.Cove Vis.         No.         Ademanday BEA IN IND         No.         No.         Annual No.           620 table Operatio laboratory-BEA         2006 PAPICT.Cove Vis.         No.         Ademanday BEA IN IND         Annual No.         No.         Annual No.           620 table	Gaseline         63.20         ID         LE         No         41572         41572 galloris           Diesel         82.00         ID         None         No         534970         4556 galloris           Diesel         DSL         ID         None         No         534970         4556 galloris           Diesel         DSL         ID         None         No         534970         4556 galloris           Biochiesel         BSD         ID         None         No         234970         4556 galloris           Biochiesel         BSD         ID         None         No         23522         35522 galloris           Biochiesel         BSD         ID         None         No         4724         27334 galloris           Lid         ASS         ESS         IS         None         No         37142         5524 galloris           Lid         ASS         IS         None         No         37142         5524 galloris           Lid         ASS         IS         No         No         37142         5524 galloris	EPACT-COREVES NO EPACT-COREVES VES EPACT-COREVES VES EPACT-COREVES VES EPACT-COREVES VES EPACT-COREVES VES EPACT-COREVES NO EPACT-COREVES NO EPACT-COREVES NO
State   Control Laboratory-BEA   2004 EMAT-Cover Very Perception   Description   Description   Description   Description   State   Description   Descripti	Diesel         DS.         ID         None         No         288555         25.556 gallons           Diesel         DS.I.         ID         None         No         53.94970         3.656 gallons           Giosoline         GAS.         ID         None         No         385522         385522 gallons           Giosoline         GAS.         ID         None         No         385522         385522 gallons           Giosoline         GAS.         ID         None         No         7.149         20.98 gallons           FAS         ESS         ID         None         No         4.746         20.98 gallons           FAS         ESS         ID         None         No         37.147         55244 gallons           LNG         LNG         ID         None         No         37.147         55244 gallons           Diesel         ESB         ID         None         No         37.147         55244 gallons           Diesel         ESB         ID         None         No         90.90           Diesel         ESB         ID         80.90         10         90.90	PEACT-Cove Yes No PEACT-Cove Yes No
Val Claim Departed in Mancal Liboratory-16th A 2004 F-804L-Clove View Press Petroleum Disposit D21, 10 Norre No. 2558210   Val Claim Departed in Collection Mancal Liboratory-16th A 2004 F-804L-Clove View Press Petroleum Disposit D21, 10 Norre No. 245091   Val Claim Departed in Collection Mancal Liboratory-16th A 2005 F-804L-Clove View No. Affertantive D45 D10 Norre No. 245091   Val Claim Departed in Collection Mancal Liboratory-16th A 2005 F-804L-Clove View No. Affertantive D45 D10 Norre No. 245091   Val Claim Departed in Collection Mancal Liboratory-16th A 2005 F-804L-Clove View No. Affertantive D45 D10 Norre No. 245091   Val Claim Departed in Collection Mancal Liboratory-16th A 2005 F-804L-Clove View No. Affertantive D45 D10 Norre No. 11458   Val Claim Departed in Collection Mancal Liboratory-16th A 2005 F-804L-Clove View No. Affertantive D45 D10 Norre No. 11458   Val Claim Departed in Collection Mancal Liboratory-16th A 2005 F-804L-Clove View No. Affertantive D45 D10 Norre No. 11458   Val Claim Departed in Collection Mancal Liboratory-16th A 2005 F-804L-Clove View No. Affertantive D45 D10 Norre No. 11458   Val Claim Departed in Collection Mancal Liboratory-16th A 2005 F-804L-Clove View No. 11458 D10 Norre No. 11458   Val Claim Departed in Collection Mancal Liboratory-16th A 2005 F-804L-Clove View No. 11458 D10 Norre No. 11458 D10 Norre No. 11458   Val Claim Departed in Collection Mancal Liboratory-16th A 2005 F-804L-Clove View No. 11458 D10 Norre No. 11458	Diese   DS.   D	PACI-LOVE YES   PES
State   Control Cont	Consider	EPACT-COVE YES EPACT-COVE YES EPACT-COVE YES NO EPACT-COVE YES NO EPACT-COVE YES NO
GOZI Clain Operatio Index Various Laboratory-Eds. A 2005 EPACT. Cover Yes         No. Attentable Register (Cover No. Attentable Register)         No. Claim C	Bit-offesel         BD         ID         None         No         244590         21394 gallors           F-85         E85         ID         None         No         4704         2008 gallors st           LNG         LNS         ID         None         No         4704         2008 gallors st           LNG         LNS         ID         None         No         4704         2008 gallors st           LNG         LNS         ID         None         No         3747         5524 gallors           Disel         RS         ID         None         No         0 gallors           Disel         DSL         ID         F/EK         No         4118         3590 gallors	EPACT-Cove Yes No EPACT-Cove Yes No EPACT-Cove Yes No
6201 Elaho Operatio Laboratory-SEA         2005 EPACT-Cover Yes         No         Attentable         CDG         CDG 3000         D         None         NO         ATM           6201 Elaho Operatio Laboratory-SEA         2005 EPACT-Cover Yes         No         Attentable         165         1D         None         NO         10455           6201 Elaho Operatio Laboratory-SEA         2005 EPACT-Cover Yes         No         Attentable         156         1D         None         NO         37147           6021 Claho Operatio Laboratory-SEA         2005 EPACT-Cover Yes         No         PetroSeum         Disell         1D         None         NO         47143           6021 Claho Operatio Laboratory-SEA         2005 EPACT-Cover Yes         No         PetroSeum         Disell         1D         None         NO         41493           6021 Claho Operatio Laboratory-SEA         2005 EPACT-Cover Yes         Yes         PetroSeum         Disell         B20         1D         None         A1493           6021 Claho Operatio Laboratory-SEA         2005 EPACT-Cover Yes         Yes         PetroSeum         Disell         B20         1D         None         NO         51055           6021 Claho Operatio Laboratory-SEA         2005 EPACT-Cover Yes         Yes         PetroSeum	EAS         EAS         ID         None         NO         4704         2008 galloss 87 31           EAS         EAS         ID         None         NO         10465         14577 galloss 87 1           LNG         LNG         ID         None         NO         37147         55284 gallors 80 1           Depend         20         ID         None         NO         0         0         0 gallors           Desend         DSL         ID         F/RK         NO         4118         3590 gallors	EPACT-Cove Yes No EPACT-Cove Yes No
GOZ 1 clain-O Departo I clain Manural Laboratory-BEA   2005 EMPCT-Cover Vis. No. Attentative E-85   E85   ID Note No. 10.95   10.95	E-85         E85         ID         None         No         10495         14377 galons           LNG         LNG         ID         None         No         37147         55284 galons @ 1.           DRS         ID         None         No         0         0 galons           DRS         ID         E/ER         No         4118         3590 galons	EPACT-Cove Yes No
Set   Carlo Operation Independent Control March   Set   Carlo March   Set   Carlo Operation Independent Control March   Set   Se	UNO 1974 STATE TO NOTE NO 37,124 STATE STA	Protection Committee
Set   Internation National Laboratory Eds.   2005 FEAT.Cook Vis.   No.   Activation   1554   150   1	Diesel DSL ID E/ER No 4118 3590 gallons	EPACI Com Voc
6201 fallon Operation Laboratory-BEA   2006 EMSL*Cover*ss   No Percolaum Gasoline GAS   D   E/FR   No EASIGN     6201 fallon Operation Laboratory-BEA   2006 EMSL*Cover*ss   No Percolaum Gasoline GAS   D   None   No SERVER     6201 fallon Operation Laboratory-BEA   2006 EMSL*Cover*ss   No Percolaum Gasoline GAS   D   None   No SERVER     6201 fallon Operation Laboratory-BEA   2006 EMSL*Cover*ss   No Percolaum Gasoline GAS   D   None   No SERVER     6201 fallon Operation Laboratory-BEA   2006 EMSL*Cover*ss   No Attentive GAS   EASIGN   D   None   No SERVER     6201 fallon Operation Laboratory-BEA   2006 EMSL*Cover*ss   No Attentive GAS   EASIGN   None   No SERVER     6201 fallon Operation Laboratory-BEA   2006 EMSL*Cover*ss   No Attentive GAS   EASIGN   None   No SERVER     6201 fallon Operation Laboratory-BEA   2006 EMSL*Cover*ss   No Attentive GAS   EASIGN   None   No SERVER     6201 fallon Operation Laboratory-BEA   2006 EMSL*Cover*ss   No Attentive GAS   EASIGN   None   No SERVER     6201 fallon Operation Laboratory-BEA   2006 EMSL*Cover*ss   No Attentive GAS   EASIGN   None   No SERVER     6201 fallon Operation Laboratory-BEA   2006 EMSL*Cover*ss   No Attentive GAS   EASIGN   None   No SERVER     6201 fallon Operation Laboratory-BEA   2006 EMSL*Cover*ss   No Attentive GAS   EASIGN   None   No SERVER     6201 fallon Operation Laboratory-BEA   2006 EMSL*Cover*ss   No Attentive GAS   EASIGN   None   No SERVER     6201 fallon Operation Laboratory-BEA   2006 EMSL*Cover*ss   No Attentive GAS   EASIGN   None   No SERVER     6201 fallon Operation Laboratory-BEA   2006 EMSL*Cover*ss   No Attentive GAS   EASIGN   None   No SERVER     6201 fallon Operation Laboratory-BEA   2006 EMSL*Cover*ss   No Attentive GAS   EASIGN   None   No SERVER     6201 fallon Operation Laboratory-BEA   2006 EMSL*Cover*ss   No Attentive GAS   EASIGN   None   No SERVER     6201 fallon Operation Laboratory-BEA   2006 EMSL*Cover*ss   No Attentive GAS   EASIGN   No Attentive GAS   EASIGN   No Attentive GAS   EASIGN   No Attentive GAS   EASIGN		EPACT-Cove Yes No
602 Idaho Operatio Idaho National Laboraton-pE6A   2005 EAUT-Coveres Pes Petroleum Diese 820 ID None No 95559	Gasoline GAS ID E/ER No	EPACT-Cove Yes No
SOZ   Claim Oberatio   Claim National Laboratory-Ed.   2005   EMACL-Cover's   Personal modes   Diseas   DSI   D	Diesel         B20         ID         None         No         96359         85577 gallons	EPACT-Cove Yes Yes
Set   Index   Details   Index   Inde	Diesel DSL ID None No	EPACT-Cove Yes Yes
602 (alaho Operatio (alaho National Laboraton-PEA         2006 EPACT-Cove Ves         No         Attentative         ONG         ID         None         12392           602 (alaho Operatio (alaho National Laboraton-PEA         2006 EPACT-Cove Ves         No         Attentative         E-85         ID         None         No         15481	Riccilege R20 ID None No 24578	EPACIT-COVE TES
602 Idaho Operatio Idaho National Laboractory-BEA 2006 EPACT-Cove Yes No Alternative E-85 E85 ID None No 16481	CNG         ID         None         No         12392         14930 Innofeed cull	EPACT-Cove Yes No
	E-85 E85 ID None No 16481 22890 gallons	EPACT-Cove Yes No
Got Jeho Operatio Lebh Antonial Laborator-BEA 2006 EPAGT-Cove-Yes No Affernative LING ID None No 37196	LNG LNG ID None No	

Remirement 2) NECPA, EISA 2007, DOE 0 436 I, E.O. 13514
Institute. This is an epitonal belief FY 2013 OHG estimates of feet find and fleet find goal performance. Enter information uploaded for to be uploaded into FAST for FY 2012 and select settings. "Currant FY" from the drog-down list in cell 1M. If the information is not readily swallable, then select "Last FY" and the historical FAST data provided will be used a placeforder for performance.

SELECT FAST All data reviewed, uplated, and is correct for FY 2013 CEDR Report - Ernest Fosson 11/65/12

Current FY

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PSO Site Num	n Fleet Parent	Fleet Name	Report Agency Year Group		EO-covered Fu	Fuel Group F	Fuel Name F	Fuel Type	Fuel State Abbreviation	Vehicle Exemption	Fuel Fr	Fuel Consumption Fuel Consumption (GGE)	Fuel Consumpti (NU)	z	H 0	Fuel Cost (\$)	Diesel .	Anthropogenic MtCO,e
NF 60	2 Idaho Operatio	Sidaho National Laboratory-BEA	2006 FPACT-Cove Vi	Agency		Petroleum Di	Diese		_		No	-0		0 gallons	1.126	0	Exempt	ď
	2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-BEA	2006 EPACT-Cove Ve	cN se				2 0			2 0	8383	73	7317 gallons	1.147	20.814	No	77.64906333
NF 60	2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-REA	2006 EPACT-Cove Vec	2 22	8		Diesel	200			0	98710	876	R7665 gallons	1.126	317 610 Coverer	Covered	730 7251 22
	2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-BEA			to Re			DSC ID			No	570713	497	497570 gallons	1.147	1,447,403	No	5280.034538
NE 60	'2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-BEA	2006 EPACT-Cove Ye	es Yes		Petroleum Ga	Gasoline G		200		0	329074	3290	329074 gallons	-	881,691 No	No	2916.049881
	603 Idaho Operatio BBWI	5 BBWI	2007 EPACT-Cove Yes			200	Ш	1333	4900		lo	588		513 gallons	1.147	1,408 No	No	5.439967739
NE 60	603 Idaho Operatio BBWI	5 BBWI	2007 EPACT-Cove Yes				ine	AS ID	.000		No	105289	1052	105289 gallons	н	277,629 No	No	933.0058767
	604 Idaho Operatio CWI	) CWI	2007 EPACT-Cove Ye	es Yes	10	9		200			No	29619	258	25823 gallons	1.147	71,003 No	No	274.0244974
	604 Idaho Operatio CWI	o CWI									No	34678	346	34678 gallons	1 00 1	98,212	No	307.2949481
NE PO	2 Idaho Operatio	602 Idaho Uperatio Idaho National Laboratory-BEA			93		Blo-diesel B				No.	18/7	a li	1844 gallons		6,362 No	No.	U COUNTY TO THE
	2 Idaho Operatio	602 Habbo Operatio Idaho National Laboratory-BEA	2007 EPACT COMP Yes	es No		Alternative Bi	Blo-dlesel B	DI PEZO		None	No	1///9	157	210EE dollonoor	T.126	54,459 NO	No	151.6154527
	2 Idaho Operatio	602 Tuallo Operatio Idaho National Laboratory-BEA						2000			No	14448	200	20067 gallons		65 402 No	No.	19 29219124
	2 Idaho Operatio	602 Idaho Operato Idaho National Laboratorica P.C.A.				1			204.200		No	44174	399	66930 rallone @	1 0.66	26 959 No	2	203 050316
NF 60	2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-REA	2007 EPACT-Cowe Ver		26	I.	a	200			NO	0	-	O gallons	1.126	0	0 Exempt	0
	2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-BEA					Diesel	DSL ID			No	8213	72	7160 gallons	1.147	21.656 No	No	75.98376708
	2 Idaho Operatio	VIdaho National Laboratory-BEA				2500	L	200			sa	115		100 gallons	1,147	302 No	No	1.063939269
	'2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-BEA	2007 EPACT-Cove Ye	es No			Gasoline G	AS ID	.000	E/ER N	No	09		60 gallons	1	164 No	No	0.531682822
	2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-BEA				Petroleum G	Gasoline G	AS ID			No	19986	199	19986 gallons	1	54,621 No	No	177.1035479
NE 60	2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-BEA	2007 EPACT-Cove Ye	es Yes	2	Petroleum Di	Diesel B.	20 ID	2000	aı	No	71118		63160 gallons	1.126	217,877 Covere	Covered	526.4685364
99	2 Idaho Operatio	o Idaho National Laboratory-BEA	2007 EPACT-Cove Yo		s Pet	oleum Di	esel D	DST ID	N N	None N	No	546878	2600	476790 gallons	1.147	1,391,626	No	5059.52156
96	2 Idaho Operatic	602 Idaho Operatio Idaho National Laboratory-BEA			800	5	ine		190		No	216402	2164	216402 gallons	1	591,372 No	No	1917.620433
99	603 Idaho Operatio BBWI	2 BBWI	2008 EPACT-Cove Yes	(0)		_	Diesel D	DSL ID	16.5		No	5701		4970 gallons	1.147	18,144 No	No	52.74363279
79	603 Idaho Operatio BBW	5 BBWI		10			ine				No	124365		124365 gallons		421,880 No	No	1102.045568
4	604 Idaho Operatio CWI	D.C.W.	2008 EPACI-Cove Ye	s	203				200		No	3884		95 gallons	0.72	20,112	No.	5.186245208
4 5	604 Idaho Operatio CWI	CANI	2008 EPACI-LOVe Ye	s	2012	Petroleum Di	Diesel	187			ON S	31501		27464 gallons	1.14/	107,540 No	No	291.4350948
19	604 Idaho Operatio CWI	C.W.	2008 EPACT-Cove Vs	yok you				di di		None	No.	87877		87822 gallons		289 771 No	No.	778 224146
199	604 Idaho Operatio CWI	CMI	2008 EPACT-Cove Ve	Sed Yes							O. O.	5		53 gallone	-	ON 151	No.	0.469653159
09	604 Idaho Operatio CWI	CWI	2008 EPACT-Cove Ye								0	104		104 gallons	i e	423 No	No	0.921583557
09	2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-BEA				Alternative Bi	Bio-diesel B	B20 ID		None N	No	11476	10.00	10191 gallons	1.126	41,709 No	No	84.95392058
99	2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-BEA	2008 EPACT-Cove Ye	S	200	Alternative Of	CNG C	CNG 3600 ID			No	157		582 gallons at 3		1,394 No	No	1.041538
99	2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-BEA	2008 EPACT-Cove Ye	s	22	00	E-85 E	E85 ID			No	14711	204	20431 gallons	0.72	69,019 No	No	19.64337107
36	2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-BEA	2008 EPACT-Cove Ve	es No	255	Alternative LN	9				No	30356	459	45994 gallons @	1 0.66	71,583 No	No	201.381704
19	Z Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-BEA	2008 EPACI-Cove Ye	es No		310		0000	6086		No	0	î	U gallons	1.126	O EX	Exempt	
8 5	7 Idoho Operatio	602 Teaho Operatio Teaho National Laboratory BEA	2006 EPACI-LOVE TO	NO NO		Petroleum Di	nesel cooling	200		E/EN	No	02770	017	2014 gallons	1.14/	14,996 P	No	
9	2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-BEA	2008 EPACT-Cove Yes		100	L	Diesel B	B20 ID	0.000	ne	No	45899	407	40763 gallons	1.126	166,834 Covered	Covered	339.7786686
99	2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-BEA		S			Diesel D	St. ID			No	677488		590661 gallons	1.147	2,174,735 No	No	6267.87902
90	2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory BEA	2008 EPACT Cove Ye	es Yes		oleum Go	soline G	GAS ID	(8)	None h	No	202635		202635 gallons	1	635,060 No	No	1795.625809
79	3 Idaho Operatio	9 BBWI			30 3	200	9				No	5210		42 gallons	1.147	22,710	No	48.2010747
90	603 Idano Operado Bevel	DBBW	2009 EPAUL-LOVE YES		969		Gasonine G	GAS ID			No.	/0262T	1292	129207 gailons	4 65 0	216,528 NO	No.	1144.952372
60	604 Idaho Operatio CWI	CWI	2009 EPACI-COVE YE	es No	200	Petroleum Di	Diesel D	283		None	No	38285	175	12851 gallons	1 147	91,767 NO 91,920 No	No	35419926
199	604 Idaho Operatio CWI	) CWI									No	62		54 gallons	1.147	117 No	No	0.573602041
60	604 Idaho Operatio CWI	CWI	2009 EPACT-Cove Ye	es Yes	65		Diesel D	25		None h	No	375	Tel	327 gallons	1.147	936 No	No	3.469367181
99	604 Idaho Operatio CWI	2 CAVI	2009 EPACT-Cove Ye	S	190	030	Gasoline G	AS ID	101		No	58214	585	58214 gallons	1	132,551	No	515,8563963
99	604 Idaho Operatio CWI	o CWI	2009 EPACT-Cove Ye	"			5000				No	48		48 gallons	1	101 No	No	0.425346257
9	604 Idaho Operatio CWI	) CWI	2009 EPACT-Cove Ve	es Yes			200	GAS WA	210		No	31		31 gallons		81 No	No	0.274702791
B 6	602 Idaho Operatio LWI	504 Idaho Operatio LWI 507 Idaho Operatio Idaho National Laboratoria REA	2009 EPACI-LOVE YES			Alternative Bi	Bloodings B			None	0 0	38062	333	33829 dallone	1 136	90 NG	No	281 0854255
5 9	2 Idaho Doeratio	o Idaho National Laboratory-BEA			28 86						ON ON	32260	715	51751 gallons	0.72	187 788 No	2 2	49.75270248
9	'2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-BEA	2009 EPACT-Cove Ye	s		Alternative LN	9				No	33440	206	50666 gallons @	1. 0.66	68,218	No	221.84096
09	2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-BEA	2009 EPACT-Cove Yes			Petroleum Di	esel B		100		No	0		0 gallons	1,126	0	Exempt	0
99	2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-BEA	2009 EPACT-Cove Yo	es No		Petroleum Di	esel D	DST ID	000	æ	No	1622	17	1414 gallons	1.147	4,011 No	No	0
39 0	2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-BEA					Ine				No	23552	235	23552 gallons	1 100	51,578 No	No	0
8 8	2 Idaho Operatio	602 Idaho Operatio Idaho National Laboratory-BEA	2009 EPACI-COVE TES	es Yes		Petroleum Di	Diesel	0 0	10 m	None	NO NO	428820	3738	373862 gallons	1.126	921 793 No	No	3967 290758
9	2 Idaho Operatio	y Idaho National Laboratory-BEA	2009 EPACT-Cove Yes		5 100		ine	GAS ID			0	163180	1631	80 gallons	1	402,329	No	1446.000047
99	3 Idaho Operatio	603 Idaho Operatio BBWI		oN se	91	rnative E-	85 E	35 ID		None N	No	24840	34	34500 gallons	0.72	138,000 No	No	33.16846832
99	603 Idaho Operatio BBWI	5 BBWI	2010 EPACT-Cove Ye	**	s Pet	oleum Di	o lasa	SL ID	N	None N	No	5944	53	5182 gallons	1.147	16,324 No	No	54.99178273

### Fleet Fuel (FAST Data)

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Source FAST	All data reviewed, $\psi$ dated, and is correct for FY 2013 CEDR Report - Ernest Fossum $11.15.12$	DR. Report - Ernest Fossum 11	115/12								Red Calculated fields. No action required	ose.		
	=		1704					0				H		
PSO Site Num	Fleet Parent Fleet Name	Report Agency Year Group	covered E	EO-covered Fue	Fuel Group Fuel	Fuel Name Fuel Type	Type Fuel State Abbreviation	v Vehicle	e Fuel ion Armored	Fuel Consumption Fuel Consumption (GGE) (NU)	Fuel Consumption Fuel (NU) Indie	al Conversion	Fuel Cost (\$) Diesel	Anthropogenic MtCO <sub>2</sub> e
3	604 Idaho Operatio CWI	2010 EPACT-Cove Yes			Alternative E-85		OI ID	None	No	21749	30207 gallons	0.72	83,134 No	29.041103
-27	604 Idaho Operatio CWI	2010 EPACT-Cove Yes	Yes Yes		Petroleum Diesel	FI DST	ID	None	No	30218	263	V-s	89,352 No	279,566233
909	Idaho Operatio CWI	2010 EPACT-Cove Yes		3.2.49	Petroleum Diesel		WY	None	No	66		1.147	261 No	0.91591293
	604 Idaho Operatio CWI	2010 EPACT-Cove Yes			Petroleum Gasoline		Q	None	No	58303	583	н	161,251 No	516.645059
992	Idaho Operatio CWI	2010 EPACT-Cove Yes	Yes Yes	1000	Petroleum Gasoline	Aline GAS	UT	None	No	29	67 gallons	T	182 No	0.59371248
NE 604	604 Idaho Operatio CWI	2010 EPACT-Cove Yes					WY	None	No	20	70 gallons	1	187 No	0.62029662
602	602 Idaho Operatio Idaho National Laboratory-BEA	2010 EPACT-Cove Yes			22	ese	Q	None	No	34501		1.126	92,840 No	255.402162
602	Idaho Operatio Idaho National Laboratory-BEA	2010 EPACT-Cove Yes			25-1		۵	<u>"</u>	No	7948		0.72	28,795 No	
602	602 Idaho Operatio Idaho National Laboratory-BEA	2010 EPACT-Cove Yes	Yes No			E85	0 9	None	oN .	81356	112	0.72	294,747 No	108.6334102
200	502 Idaho Operatio Idaho National Jabanese BEA	2010 EPACI Coop Vot			Petroleum basoline		2 2	None	No No	120001		1 136	1,765 NO	1021 21 20 2
	502 Idaho Operatio Idaho National Ishoratow BEA	2010 EPACI-COVE IES	Vec Vec		ı	DZG IS	2 6	None	No	422006	267071 gallone	1 147	1114 200 No	3004 25004
	602 Idaho Operatio Idaho National Laboratory-BEA	2010 FPACT-Cove Ves			. .		2 2	None	S S	188271			477 911 No	1668.34094
	Idaho Operatio BBWI	2011 EPACT-Cove Yes					9	None	No	29926			128,007 No	39.9597
	603 Idaho Operatio BBWI	2011 EPACT-Cove Yes			Petroleum Diesel		Q	None	No	5139	4481 gallons	1.147	16,412 No	47.54420784
	603 Idaho Operatio BBWI	2011 EPACT-Cove Yes				Je.	О	None	No	52666			337,210 No	885.562046
604	Idaho Operatio CWI	2011 EPACT-Cove Yes			Alternative E-85		D	None	No	28823	40033 gallons	0.72	127,154 No	38.486906
7-01	604 Idaho Operatio CWI						ID	None	No	30685	267	1.147	93,703 No	283.8867518
	604 Idaho Operatio CWI	2011 EPACT-Cove Yes					00	None	No	23		1	83 No	0.20383
	604 Idaho Operatio CWI	2011 EPACT-Cove Yes			1		0	None	oN :	57706	22.2		188,202 No	511.354815
	604 Idaho Operatio CWI	2011 EPACI-Cove Yes					10	None	oN .	1/		,	61 No	0.150643466
	504 Idano Operatio LWI	2011 EPACI-LOVE TES					À C	None	ON I	43		1 000	ON TOTAL	0.38103
500	Idaho Operatio Idaho National Ishoratow BEA	2011 EPACI-COVETES			Alternative E.95	igo ci	2 5	u u	No	14234	26591 gallons	0.72	111 264 NO	049.97999
602	602 Idaho Operatio Idaho National Laboratory-BEA	2011 EPACT-Cove Yes			350		0	None	No	77508			327,543 No	103,495235
	602 Idaho Operatio Idaho National Laboratory-BEA	2011 EPACT-Cove Yes			Petroleum Gasoline		QI	=	No	58583		T	179,204 No	
e core	Idaho Operatio Idaho National Laboratory-BEA	2011 EPACT-Cove Yes	Yes Yes		Petroleum Diesel	el B20	ID	None	No	297176		1.126	1,054,737 Covered	2199.91863
	602 Idaho Operatio Idaho National Laboratory-BEA	2011 EPACT-Cove Yes		Oleca			D	None	No	259470		1.147	788,972 No	2400.5245
	Idaho Operatio Idaho National Laboratory-BEA	2011 EPACT-Cove Yes				ine	Q	None	No	112333	-	1	343,989 No	995.4254
	603 Idaho Operatio BBWI	2012 EPACT-Cove Yes					0 !	None	No	19234	2	0.72	94,273 No	25,682863
	603 Idaho Operatio BBWI	2012 EPACT-Cove Yes			-		QI .	None	No	8304	ar k	1.147	25,840 No	76.825668
	503 Idaho Operatio BBWI	2012 EPAUL-LOVE TES	Yes Yes		Alternative C of	MINE GAS	0 9	None	No	91520	Sect adless	T CC 0	314,212 No	B10,993538
	604 Idaho Operatio CMI	2012 EPACT-Cove Ves					2 2	None	No.	20278	18116 gallons	1 147	69.470 NO	192 230696
	Idaho Operatio CWI	2012 EPACT-Cove Yes				ne	9	None	No	22			80 No	0.1949
	604 Idaho Operatio CWI	2012 EPACT-Cove Yes	Yes Yes		L	oline GAS	O	None	No	42402	42402 gallons		144,199 No	375.74025
NE 604	604 Idaho Operatio CWI	2012 EPACT-Cove Yes	Yes Yes	920	Petroleum Gasoline		UT	None	No	142		Ţ	476 No	1.2583160
58.	604 Idaho Operatio CWI	2012 EPACT-Cove Yes			Petroleum Gasoline		WY	None	No	38	39 gallons	1	142 No	0.34559383
NE 602	602 Idaho Operatio Idaho National Laboratory-BEA	2012 EPACT-Cove Yes	Yes No		Alternative Bio-diese		QI	None	No	82423		1.126	349,023 No	610,15806
	Idaho Operatio Idaho National Laboratory-BEA	2012 EPACT-Cove Yes					OI	None	No	329693	2927	1.126	1,396,090 Covered	2440.6323
	602 Idaho Operatio Idaho National Laboratory-BEA	2012 EPACT-Cove Yes	Yes	Alte	01		0 9	<b>H</b>	No	m o		1.126	10 No	
	DOZ TUBITO UDELATIO TUBITO INALIDITAL LADORACIIY-DEA	ZOIZ EPACITON					9 9	The state of the s	INO	OT		O TE	44 Covered	200000
NE POS	602 Idano Operatio Idano National Laboratory-BEA	2012 EPAUL-LOVE TES	Yes No		1	0.00	2 9	None	NO NE	124450		0.72	297,149 NO	86,0523838
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7 4	CONTRACTOR DESCRIPTION OF THE PROPERTY OF THE	7117 PERMITTERNY	Yes Yes		Petroleum Gasoline		_	None	ON	101180	101180 gallons	-	330 797 No	896.5944648

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Prop Name	100000000000000000000000000000000000000	CITIES C Control System Research Faculty (TTTES C Communication Basearch Taribbe	Deep Hote IC	CITRIC Explosives Detection Research Cir.	CITEL Wheless Comm. Support Building	WROC Suport Balding	Weer Purplease	D&D Packon Utilize	D&D Cod Office Students	D&D Project Mant Office	D&D Craft Theler #2	ATR Technical Sumont Building	Sweedish Substation	Roads & Oround Steners #1	Roods & Oround Straser #2	Ponds & Ground Stress #5	Poods & Ground Screen #4	Roads & Ground Strates #5	Poide & Form Sprage #6	Roads & Ground Screen #7	ATR Test Thun Assembly Pacifity (TTAP)	Redomarking Company Leb (RaCL)	ATRC No. Ore Stream Building	Parf. Some Building	TTAF Some Building	Double & Bermil Green 48	to a common or more	Account account account of	Purity route weares	Surrey State of the State of th	MATA UNIX Essement	Warn Ware Treatment Facility	Cuperters Shop	Demineralizer Building	Congressor Building	Retention Burn Stang Pamp House	Office BaldingBask House	Cutstria	Rew When Burnhouse	Office Dealding	Market Meterial from & Sonice	Contract to the state of the state of	Cold Weste Handling Facility	Substation Control House	ATR Materiators Support Bidg	Pac I Oil Prasphouse	Bugiesering Office Building	Cold Borngs Bldg	Acid & Cantrix Pump house	Diesel Frewster Peophouse	ATR Bongs Facility	Warm Weste Bifterst Monden Bation	QA Office Trader	Hanndow Chem Stonge E05g	Storage and Matternance Building (Gunna)	Restor Whg Exercion C	Puzg House Well #3	Reactor Who Extension B	ATR Marianesce Stop	TRA Access Control Facility	Strong Building (ARRAD)	specific or se commissionates atop	Safety and framm Applied he search for.	THE PROGRESS AND THE PARTY OF T	Cold Some Distance	Con sorte busing	ATK Peactor Building	ATR Cooking Town Pamphouse	Puzz Hous & Will #4	Storings Eldig	Discel Generator Bidg	Warte Oil Dumpeter She d	RTCFfmess Center	Text Shop	Radiation Ideas rement Laboratory	ATR Smulton Truming Facility	Busgarcy Control Center	Temporary Accomplation Area A.	Temperary Accumulation Area B	Temporary Accomplation Area C	Temporary Accommission Area D	Temporary Accomplation Area E.	Temporary Accompation Area F	the Boths Arrage Fucility	RICENsurer Surphouse	Dynamic Le strang Fectify
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	GSFT BC	317	829	1,623	3,600	1,525	33,040	5,044	1,372	33	1133	1577	1,538	1,605	34,262	1,812	1,568	1,000	5,483	4999	1,568	4,518	128	007	2009	20,800	1,680	1,106	1,620	317	317	677	400	1,432	1,432	720	300	300	1392	3,584	3389	11,557	3300	280	1345	1,580	4,000	3 5	20 0.0	950	90 S 294	#0.00 80 80.00 80.00 80.00 80 80 80 80 80 80 80 80 80 80 80 80 8	200	20,524	40,954	316,511	2000	901	400	1,440	234,922	0089	1,500	3,600	2,000	1,200	00 5	000	1,570	887	1,440	1,495
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FIMS Facility Informati	Prop Name Ext Part	T Workson Street Office	ICDF Rad Con Trailer	D&D Creft Theler D&D Creft Theler	D&D Offices	I WITU Doctation Centrol Trailer Patrolical Recharge II	Patre real Exclorure III	Rudon Beld Office	Change House & Lunch Room	WellBoxe 87	Herry Equip. Storage Steel	Wink Control Center Trains	Work Conto) Support, Thiller	Office Assex, Touler	Operatives Control Building	Fremas Parpione #2	Construction Support Theiler	read Super mand	Marriel Handling Parities	Maintenance Facility	Court Field Support, Traibr	RWMC Office	Hazelou Martial Sange	building Patier	During trains	AND Sorus Ehrloure	AFP Sample Sapport Brilder	AEP PatromaChang Bonn	AEP Operations Support Trailer	ARP Non Destructive Accept East Trailer	ARP Office Traibr	AND MACON Transfer	ARP Winners Change Their	637 West Office Thaler	637 Est Office Traller	Bunkg Office Truby (AMWTP)	Tool Chb (AMANTP)	Tool Cab (AddWIP)	Sheener Transcription Office (AMENTS)	AMIWIP Training Complex (AMWIP)	RWMC High Boy (AMWTP)	Waste Esamination Plant (AMWIP)	Updatures Support Manay (AddWTP)	Water Little Dag or Uprandual (Fig.W.12)  Drooms Manorina Bouches (AMELTO)	Drum Verting Sys Bidge (ASWITP)	Shipping Brad com (AMWTP)	Depot II Loading Pacity (AMWTD)	Fre Riser Buckours (AMWTF)	Program (Action 19 (Action 19)	Type II Storage Module AC (AMWTR)	Type II Storage Module HS (AMWVTP)	Type II Storage Module H4 (ALMWITE)	Type II Stories Module 46 (AMWID)	Type II Ronage Identile #7 (ALIWITP)	Type I Straigs Module (AMAVITY)	TSA Particolal Excision (AddWTP)	Vehicle Resair Sun (ARWITE)	Automatic Transfer Switch Bilg (AUGWTP)	RodCon Insider (AMAVIE)	Retrieval Operations Trailer (AMWITP)	Adv Janed Waste Treatment For (AMWTP)	AMILTO Office Itsile (AMILTO)	AMWIP Workshop (AMWIP)	Assembly Bulke (AMWTP)	Accountability Traine (AMWTP)	AMWIP Shows Italia (AMWIP)	Office Theller - Retrieval Reff (AMWTF)	Break Thailer (ADRWTP)	Caperter Stop (AddWTF)	Warhouse Office Trailer (AMWIP)	Ste Wardonse (AldWTP)	Constructed & Storings ( AMAVTE)
	Prop ID		143093 CPP-TR-57																						1	1							WAR-TR-7	WAR-TR8	WAR-TRO	WMF-3501	WASF-1602	WORF- DOS	WAR-1613	WAE-1620	VMF-602	WMF-610	WARF-611	WARF-OLD	WARF-615	WMF-617	WMF-618																			ıı	- 1	- 1	1	1 1	ı	
	n SeqNe	142196	143093	204026	207164	30,9640	20897	96033	96050	203756	90051	137201	127272	127270	24857	128144	127273	1/2/2/2	926351	125735	127293	126919	131592	20000	200002	204163	202157	204023	202165	205464	204468	203463	202167	202097	202711	202130	202131	202132	20262	207993	96034	96052	75000	250200	60006	96040	96041	127336	DESCRIPTION OF THE PERSON OF T	5896	126921	126922	120024	120025	126926	126927	30,9849	203763	204415	20416	202168	200124	202136	202137	200603	202169	202138	202159	202144	202145	202146	202147
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	Site Name	Idaho National Lab-Scoylla	Idaho National Lab-Scoulle	Idaho Matoral Lab-Scoulle	Idaho National Lab-Scoulle	Idaho National Lab-Scoulle	Idaho National Lab-Scoulla	Idaho National Lab. Scoulle	Idulo Netional Leb-Scoulle	Idaho Mational Lab-Scoulle	Idaho National Lab-Scoulle	Idaho National Lab-Scottle	Idaho National Lab-Scoulle	Idaho National Lab-Scoulle	Idsho National Lab-Scoulle	Idaho National Lab-Scoulle	Idaho National Lab-Scoulla	John Nethoral Lab-Scottle	Idaho National Lab Scorilla	Idtho Netional Lab-Scoville	Idaho National Lab-Scoulle	Idaho National Lab-Scoulle	Idsho National Lab-Scoulle	Idaho Nahoral Lab Scoute	Ideo National Leb-Scoutta	Idaho National Lab-Scoulla	Idaho National Lab-Scoulla	Idtho National Lab-Scoulle	Idaho National Leb-Scoville	Idaho Netional Leb-Scoulle	Idaho National Lab-Scoulle	Idaho Netional Lab-Scoulle	Idaho National Lab-Scootla	Idaho National Lab-Scoulle	Idaho National Lab-Scoulle	Idaho National Lab-Scoulle	Idaho National Lab-Scoulle	Idaho National Lab. Conflic	Idulo National Lab-Scoulle	Idtho National Lab-Scoulle	Idaho National Lab-Scoville	Idaho National Lab-Scoulle	Idaho National Lab-Scoulle	Idaho National Lab-scorite	Idaho National Leb-Scoulla	Idulo National Lab-Scoulle	Idaho National Lab-Scoulls	Idulo National Lab Scoulls	Idaho Mational Lab. Scorilla	Idaho National Lab-Scoulle	Idaho National Lab-Scoulle	Idaho National Lab-Scoulle	Idaho National Lab-Scoulle	Idulo National Leb-Scoulla	Idsho National Leb-Scoulls	Idulo National Lab Scoulle	Idaho Mational Lab. Scorilla	Idaho National Leb-Scoulle	Idaho National Lab-Scoulle	Idaho National Lab-Scoulle	Idaho National Lab-Scoville	Idaho National Lab. Scoriffa	Idaho National Lab-Scoulla	Idaho National Lab-Scoulls	Idaho National Leb-Scoulle	Idaho National Lab-Scoulle	Idtho National Lab-Scoulle	Idulo National Lab-Scoring	Idtho National Lab-Scoulle	Idaho National Lab-Scoulle	Idaho National Lab-Scoulle	Idaho National Lab-Scoulle

Notes	Additional Information								200														
Covered Facility Information	Benchmarking System																						
	Berchnading Bendunading Status System																						
	Retro Re- Counds signing Assessment																						
	Amicipated or Retro Re- Artual Brahadian Commissioning Type/Level Assessment																						
	Actual Water Ac Evaluation Date (HEAVY)																						
	Anticipated or A Artial Buegy A Brakeston Bate Ev (ARIATY)																						
	Estimated Total Antidipated or Energy Used Branch B	100% Covered	100% Covered	100% Covered	100% Covered	100% Covered	300% Covered	300% Covered	100% Covered	300% Covered	300% Covered	100% Covered	300% Covered	300% Covered.	300% Covered	100% Covered	300% Covered	100% Covered	100% Covered	100% Covered	100% Covered	300% Covered	300% Covered
	Covered or Est Not Est Covered? (00	Covered 10	Control 10	Covered 10	Covered 10	Covered 10	Covered 10	Covered 10	Covered 10	Covered 10	Covered 10	Covered 10	Covered 10	Covered 10	Control 10	Control 10	Covered 10	Covered 10	Control 10	Covered 10	Corered 10	Control 10	Covered 10
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	EMS Site P	603 EM	603 ETA	603 ETM	603 EM	603 EM	603 ETM	603 EM	603 EM	603 EDA	603 HE	603 NE	603 NE	603 NE	603 HE	603 NE	603 NE	603 HE	603 NE	603 NE	603 HE	603 NE	603 NE
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		1360	1,680	300	300	300	300	300	300	2,750	949	113,259	6,121	19877	12,050	66188	25,142	12,523	30 D00	30,500	360	772	410
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FIMS Facility Information	ExiPer																						
FIMS Facil	Prop Name	Brede Boom Facility (AMWIP)	Storage Facility (AMWTD)	Assembly Truker Pestroom (AMWIP)	Thuller HI (AMIWITE)	Thulse #2 (AMEWIT)	Trailer	Thillie HT (AMIWITE)	Trube #8 (AMWIP)	Assigned Laboratory	Clemical Strage Building	SMC Assembly Building	Sung Bilg	SMC Office	Truck Docking Bidg.	Manfacturing & Assembly Billig	Manfaturing and Assembly Amex	Weste The annest Bildg	Sung Builting	Warhouse	Oil Bangs Facility SMC	SMC Caperior Stop	Paint Shop Building SMC
	Prop III	202148 WANF-694	202149 WASP-696	202156 WhdF-609	202170 WMF-CT-1 Trailer #1	202171 WASP-CT-2	202172 WARF-CT-5	202173 WMF-CT-7	202174 WMF-CT-8	209510 While TR.14 Area tick	140581 TAN-1613	95195 TAN-629	95179 TAN-658	95166 TAN-675	93859 TAN-677	95182 TAN-679	205001 TAN-679A	95181 TAN-681	95180 TAN-682	93851 TAN-688	94609 TAN-690	94608 TAN-692	94607 TAN-693
	SeqNe	20214	20214	20215	20217	20217	20217	20217	20217	20951	14058	9519	9517	9256	686	9518	20300	9518	9518	9382	0996	0986	0966
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	Stre Name	Idaho Hatioral Lab-Scoville	Ideho Neticeal Leb-Scoulle	Ideho National Leb-Scordle	Ideho Hetioral Leb-Scoulle	Ideho Netional Leb-Scoulle	Ideko National Leb-Scordle	Idsho National Lab-Scoulle	Idaho Hatioral Lab-Scoulle	Ideho Hational Leb-Scoralle	Idsho Hatioral Lab-Scoulle	Ideao Hetioral Leb-Scoulle	Ideho National Leb-Scoralle	Ideho Hetioral Leb-Scorille	Idea National Leb-Scoulle	Ideho National Leb-Scorelle	Idsho Hational Lab-Scorille	Idaho Hatioral Lab-Scoulle	Ideko Hetioral Leb-Scoulle	Ideho Hetioral Leb-Scordle	Idaho National Lab-Scoulle	Idea National Leb-Scoulle	Idea National Leb-Scoulle